THE

PALESTINE EXPLORATION FUND

NOTES AND NEWS.

The reports and letters which are published in this number of the *Quarterly Statement*, show the very great value of Captain Conder's campaign of 1881. The singular prehistoric monuments, some of which had already been examined by Messrs. Irby and Mangles, Canon Tristram, and Herr Schick, have now been examined, sketched, and planned in detail. They are found to be grouped intentionally, not scattered about without regard to order. The four great centres of these rude stone monuments are proposed by Captain Conder to be identified with places of no less Biblical importance than Bamoth Baal, Baal Peor, the "top of Baal Peor which looked towards Jeshimon," and the sanctuary of Baal Peor, in the Jordan Valley. If these identifications are accepted we may, indeed, congratulate ourselves upon the first fruits of our expedition. The report on Arab Folk Lore is a contribution to a branch of the subject which we have as yet only touched. The importance and interest of the architectural discovery made by Captain Conder at Ammân may be gathered, not only from his own report, but from Professor Hayter Lewis's paper on the subject, reprinted by permission from the *Builder*.

The examination of the tunnel at the Pool of Siloam, the plan and drawings, of the newly discovered church, and the note on the ancient monuments of Western Palestine, are the results of the winter residence of the party in Jerusalem.

It was announced in the January *Quarterly Statement*, that further progress with the survey had been stopped by the Turkish authorities on account of informality in the Firmân. It was found necessary to apply to the Sultan for a new Firmân, and this has been done for the Committee by Lord Dufferin, Ambassador at the Porte, whose interest in the work of the Society is gratefully acknowledged by the Committee. Captain Conder also travelled to Constantinople in order to place himself at his Excellency's orders. The result has been a promise that a Firmân should be granted with permission to sketch, excavate, &c., within certain limits. Captain Conder has therefore returned to Jerusalem, in hopes that the Firmân may be signed at an early date, and so permit the resumption of field operations. In the meantime, the survey party is being usefully employed in plotting the survey on paper and in various minor inquiries into matters of Biblical and archæological interest.

As regards the publication of the various works in the Committee's hands, we take this opportunity of reporting that :—

1. The second volume of Memoirs will be sent out to subscribers in the second week in April.
2. Saunders' "Introduction to the Survey," is now ready.
3. The "Water Basin," edition of the reduced map, with the Sections, &c., is also ready.
4. The Old Testament map is already far advanced, and is expected in June.
5. The Index to the *Quarterly Statement* from the beginning is now ready, its price is 2*s.* 6*d.*, including postage.

For those who have not yet had an opportunity of seeing the beautiful edition of the map called the "Water Basin" Edition, it may be well to explain that it differs from the former "Reduced Map" in having received certain additions. The most important of them is the marking out of the waterparting lines and the waterways, plains and highlands in colour, so as to show more clearly the conformation of the country, the lie of the hills, and the natural roads. This is done in colour. In addition, Mr. Saunders has drawn sections of the country, viz., one from east to west of Upper Galilee, and one of Lower Galilee, two from east to west of the Mountains of Judæa, and one from north to south. The map is like its predecessor, in six sheets and a portfolio.

TREASURER'S STATEMENT.

The amount of subscriptions for the year 1881 fell short by £200 of the amount spent on the Expedition East of the Jordan. At the same time there was an increase of £1,000 on the subscriptions of 1880. It is hoped that the increase will continue, and that the subscriptions of 1882 may reach the sum of £3,500, which is required for the carrying on of the Society's work. The unpaid accounts at the end of the year amounted to £778 5*s.* 11*d.*, and the cash balance to £112 11*s.* 7*d.*; but the latter should be increased by the sum of about £1,500 still owing to the Committee on account of the various editions of the Map and Memoirs.

The expenditure of £2,647 6*s.* 6*d.* on "Maps and Memoirs" account includes the first three volumes of the Memoirs, Saunders' "Introduction," and the engraving and editions of the reduced maps. It includes the sum of £100 for extra clerk's work. This, if transferred to "Management," would raise the expenditure under that heading to 13·28 per cent. of the whole.

The whole expenditure of £6,487 2*s.* 8*d.* may be thus classified :—

Exploration	40·51 per cent.
Maps and Memoirs	40·81 „
Returned to Subscribers in Quarterly Statements	7·40 „
Management	11·28 „

BALANCE SHEET, 1881.

1881.		£	s.	d.	£	s.	d.
Jan. 1.	Balance from 1880.. ..	1,365	4	1			
	Less unpaid account ..	260	15	3			
					1,104	8	10
	Subscriptions and Lectures				2,430	5	10
	Publications				144	6	3
	Photographs				18	10	11
	Map and Memoirs				2,123	15	6
	To unpaid accounts				778	5	11
					6,599	13	3

	£	s.	d.
Expenditure on the Survey	2,628	12	7
Map and Memoirs	2,647	6	6
Rent	128	11	0
Printing	398	5	1
Advertising	40	14	10
Salaries and wages	436	2	8
Stationery, Office expenses, and Sundries	70	18	0
Postage	136	11	0
Balance	112	11	7
	6,599	13	3

WALTER MORRISON,
Hon. Treasurer.

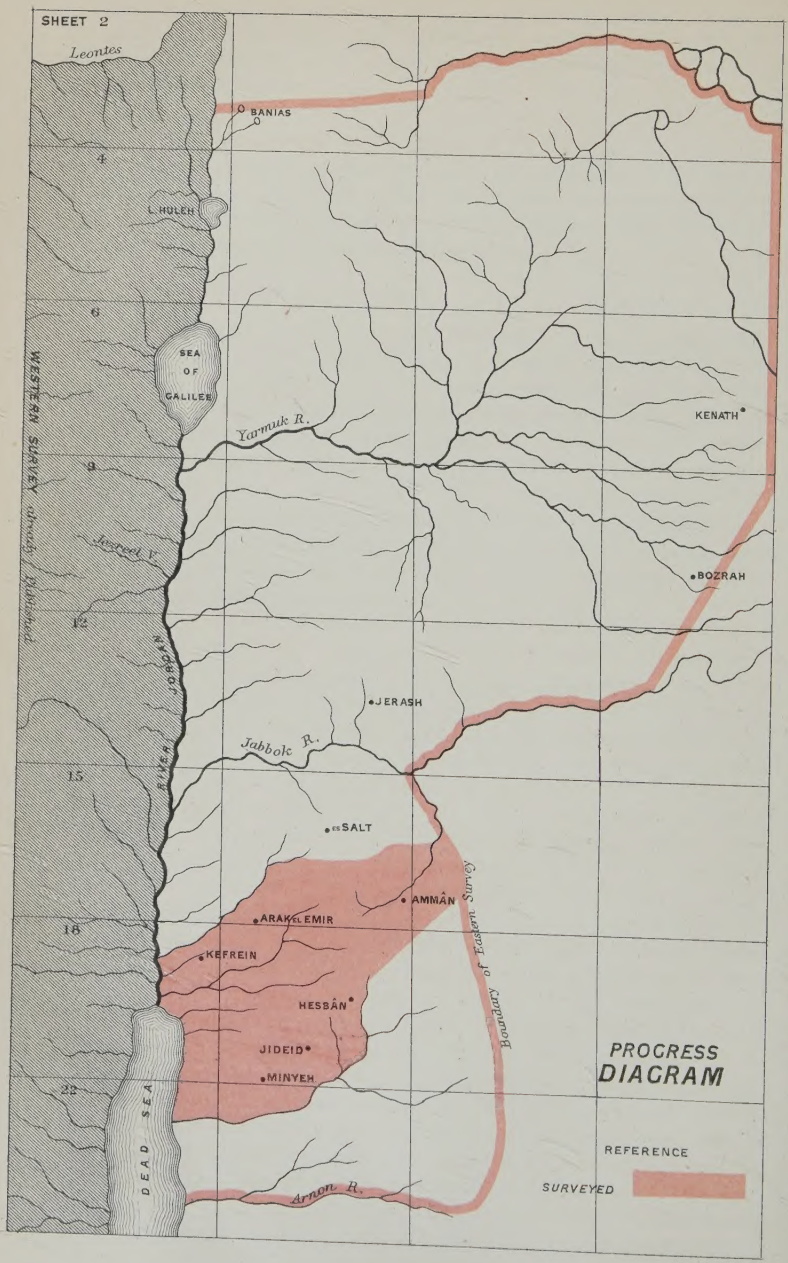
The income of the Society from all sources from December 16th, 1881, to March 15th, 1882, was £998 6*s.* 6*d.* The amount in the Banks on Tuesday, March 21st, was £429 7*s.* 5*d.*

It is suggested to subscribers that the safest and most convenient manner of paying subscriptions is through a bank. Many subscribers have adopted this method, which removes the danger of loss or miscarriage, and renders unnecessary the acknowledgment by official receipt and letter.

The following numbers of the *Quarterly Statement* are out of print. The Committee would be very much obliged by the return of duplicates or of any copies which may not be wanted. They are 1871—January and July; 1872—January and April; 1871—April, July, and October; 1874—January and October; 1880—January; and 1881—April.

Subscribers who do not receive the *Quarterly Statement* regularly, are asked to address the Secretary on the subject. Great care is taken to forward each number to all who are entitled to receive it, but changes of address and other causes give rise occasionally to omissions.

While desiring to give every publicity to proposed identifications and other theories advanced by officers of the Fund and contributors to the pages of the *Quarterly Statement*, the Committee wish it to be distinctly understood that by publishing them in the *Quarterly Statement* they neither sanction nor adopt them.


SHEET 2
Leontes
BANIAS
L. HULEH
SEA OF GALILEE
WESTERN SURVEY already Published
Yarmuk R.
KENATH
BOZRAH
Jezreel V.
JERASH
Jabbok R.
JORDAN RIVER
SALT
AMMÂN
ARAK el EMIR
KEFREIN
HESBÂN
JIDEID
MINYEH
DEAD SEA
Arnon R.
Boundary of Eastern Survey
PROGRESS DIAGRAM
REFERENCE
SURVEYED

CAPTAIN CONDER'S REPORTS.

X.

Bamoth Baal and Baal Peor.

Ain Yalo, 21*st November*, 1881.

In a former report I described briefly some of the rude stone monuments which we examined at Hesbân, but as yet I have not given any account of the still more interesting groups which we discovered later, including structures of seven different kinds, viz.: 1. dolmens (or cromlechs); 2. Menhirs or standing stones; 3. cubical stones in circles or standing alone; 4. Circles of rude stones piled in a heap; 5. Rude pillars; 6. Cairns; 7. Disk stones.

Of these the cromlechs or dolmens (whichever be the correct title) are the most numerous. In Wâdy Hesbân there are about 50; round Wâdy Jideid there are groups which give together a total of about 150. On the north side of the Zerka M'aîn there is a large group, numbering some 150. At Mount Nebo there are only a very few in connection with a large stone circle and cairn. At 'Ammân we discovered 8 in all very much scattered. Near the Jabbok there is another group not yet visited, and in the Ghôr es Seisebân, for a distance of about two miles, between Wâdy Kefrein and Wâdy Hesbân, all the spurs are covered with dolmens, numbering between 200 and 300 in all, while north and south of these limits not a single specimen can be found for many miles. The total of 600 to 700 is thus divided into seven very distinct groups, each occurring in the vicinity of fine springs, and of hill-tops commanding an extensive view; and the impression which I noted in my former report is fully confirmed, for the dolmens are not scattered over the country without system, but are confined to localities at considerable distances apart, where they are crowded close together, generally appearing to group round a central point on a hill-top.

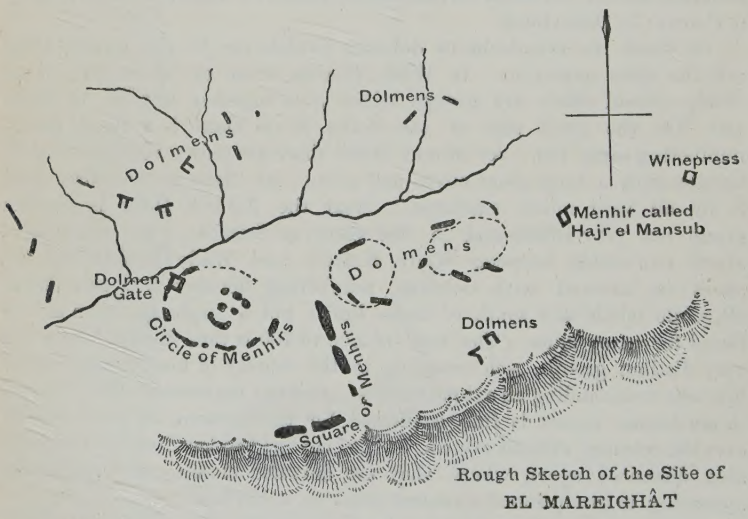
Although no previous traveller has been enabled to examine carefully all the groups mentioned, the discovery of such monuments dates back more than sixty years, to the time when Irby and Mangles made their adventurous journey to Moab and Gilead. At a later period the dolmens have been briefly described by Dr. Tristram; and some of the menhirs have been visited and measured by Herr Konrad Schick. The collection, however, of such a large number of examples, as are now noted, enables us to draw various conclusions which would not suggest themselves at first in studying these monuments.

The first distinct specimen of *menhirs* we found on the north bank of the Zerka M'aîn. A very remarkable stone, 8 feet high, 4 feet 6 inches

broad, and about 2 feet thick, here stands up alone on a flat plateau, while on the low surrounding hills are numbers of large dolmens, some of which are very carefully constructed. The standing stone is called *Hajr el Mansûb*, a name signifying "the erected stone," and closely allied to the Hebrew מצבה, rendered generally "pillar" in the Old Testament.

About three quarters of a mile further west are still more remarkable remains. A flat knoll here rises within a sort of hill-theatre. On the south the plateau leads to the brink of a very steep slope, at the bottom of which the springs of the Zerka rise surrounded by oleander bushes. On the east, north, and west are spurs of hills which sink into the little plateau. The knoll is surrounded by remains of what was once a great circle of menhirs, varying in height from 3 feet to 6 feet, all of slightly rounded or pointed shape at the top, and from 2 feet to 3 feet broad at the base.

There appears to have been a second similar circle higher up the slope of the knoll, within that already described; and on the highest part are three very conspicuous stones, the loftiest being 6 feet high. There are three



Rough Sketch of the Site of
EL MAREIGHÂT

rows of similar menhirs on the east side of the knoll; and the plateau seems at one time to have been converted into a square court, by similar *cippi*, of which one row exists on the south running east for 30 yards, and another on the east running north and south for a greater distance.

On the north-west, immediately outside and adjoining the large circle, is a single dolmen, which thus seems to form a door to the circle, like those smaller reproductions of this class of monument which I have already described as being still constructed, by the Arabs of the district, round sacred tombs.

The hill spurs which surround this remarkable circle are all covered

with dolmens, of which there are at least 150 in all. They occupy the slopes of the spurs, and are almost without exception in view of the menhir knoll which appears to form the centre. On the plateau, which measures about 400 yards either way, are several smaller stones, arranged within the square court and south of the knoll, which is surrounded by the circle. About twelve or more are scattered over this area without any special method being apparent in their grouping.

On the northern hill, close to the dolmens, are three of the curious recesses which I before mentioned in connection with the Hesbân crom-lechs. These are cut in rock, and two are only 3 feet and 4 feet respectively in length, while the middle one measures 6 feet by 7 feet. East of the Hajr el Mansûb is a very fine winepress, with three chambers, and on the hill north of the circle is a large flat cairn. The place does not, however, command any special view, save that of the great Zerka valley, and of the fine springs just below the plateau. The whole of the site obtains the name *Umm ez Zueitîneh*, "mother of the little olive tree," and although there is no evidence that olives ever existed, the Arabs say that oil was once made here, and point to the great winepress as evidence—supposing it to be an oil-press, which is clearly impossible.

The real origin of the name may perhaps, however, be traced in the title *el Mareighât*, which is applied to the menhir circle. This signifies "the places smeared" with oil, blood, or any thick liquid, and this appellation seems to me, as I hope to show immediately, to be of the greatest value in determining the origin and character of the curious monuments above described.

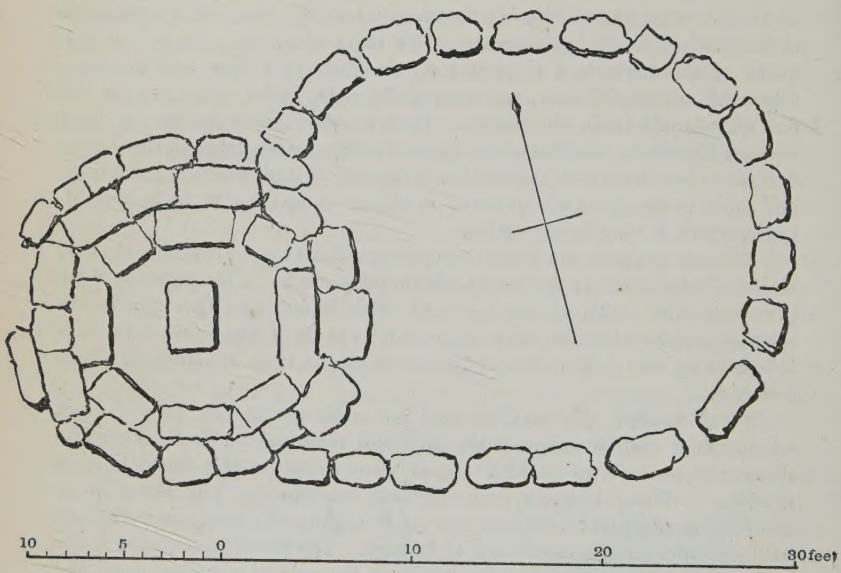
Before visiting this site, we had not come across any very distinct specimens of similar monuments, although remains of a circle of upright stones and one or two isolated stones were found among the dolmen of Hesbân. When, however, we rearched 'Ammân we discovered three menhirs in different directions, one 12 ft. high (now fallen), one 8 ft. high (still standing), and a third only $4\frac{1}{2}$ ft. high. The second mentioned had a hollow in one side measuring 9 inches by 5 inches, and 5 inches deep, the third had a cup-shaped hollow in the top, 6 inches in diameter and 4 inches deep. Another isolated stone, 11 ft. long and 5 ft. broad, was afterwards found by Lieutenant Mantell among the dolmens of Kefrein, having a recess in the side 18 inches by 8 inches and 6 inches deep. The object of these niches will be suggested immediately.

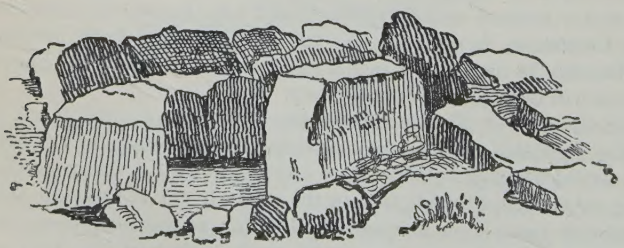
Three miles west of El Mareighât is the little plateau which forms the edge of the highlands, and whence a sharp descent leads to the lower plateau over the Dead Sea cliffs. Here 400 feet down the western slope is the spring called 'Ain Minyeh, and on the very edge of the plateau above occurs a row of seven stone monuments, differing in character from those already noticed. The best specimen is the most southern of the group, and this was photographed by Lieutenant Mantell; the rest, which are all within half a mile distance, are clearly of the same construction, though partly destroyed.

A stone, rudely squared, measuring 3 feet 4 inches by 2 feet 5 inches

and 3 feet 6 inches high, stands in the centre of a circle, or rather polygon, of similar rudely dressed stones; the diameter of the structure was about 6 feet, and the side walls, originally two courses in height, were more than 4 feet to the top. On the east a sort of little court, 30 feet across, is formed by a rude circle of rather small stones. By one of these monuments is a flat rock, in which a small trough, 18 inches long, 1 foot broad, and 3 inches deep, has been cut (evidently artificially).

Minyeh Rude Stone Monument.





The name *Mena* (from the same root with Minyeh) also applies to a single stone, 8 feet long 3 feet high, which is found further north, close to a group of rude pillars, to be described immediately. The word signifies

"desire" and the stone in question is considered to be a "wishing stone," where the Arabs of the district (the 'Ajermeh) go to wish for anything they may desire. In the same way 'Ain Minyeh is called the "spring of desire," because, according to a long legend hereafter to be related, Mâin 'Aly here fainted with thirst, and was instructed by Allah to strike the ground with his spear, when the fountain at once sprang out of the hillside. But while this interpretation of the words Mena and Minyeh is well known to the Arabs, they are not apparently aware of the origin or purpose of the seven stones at Minyeh, which they state to be very old, and call only Rujûm, or "cairns." They do not appear to hold sacred either these or the other stones at El Mareighât; and they consider the dolmens, as noticed in a previous report, to be haunted by ghosts, and consequently erect stone pillars in their vicinity as a propitiation.

Another monument similar to those at Minyeh was measured by Lieutenant Mantell south of Kefrein. A circle, about 12 feet in diameter, here surrounded a stone, 2 feet 6 inches by 1 foot 6 inches, and 2 feet 6 inches high, the circle consisting of blocks of black limestone, 2 to 3 feet long, rudely squared. It should be noted that these monuments are perfectly distinct from the stone enclosures and platforms which mark the sites of Arab encampments, and which form the primitive Bedawin bedsteads. For those that have seen specimens of both these structures it is impossible to mistake one for the other.

In connection with the dolmens and menhirs stone circles also occur. The largest specimen found is the place called Hadânieh, just above 'Ain Jideid. It is 250 feet in diameter, with walls from 27 feet to 41 feet thick. The survey camp was pitched inside it, as a safeguard against horse thieves, by whom we were disturbed nearly every night. A little modern Arab circle, with its altar door on the west (as noted in my previous report) occurs just outside the great circle on the south-east; and the great ancestor with its diminutive descendant present an interesting and instructive contrast. On Mount Nebo is a similar stone circle of about the same size, with walls 12 feet thick. The stones in both cases are undressed, averaging about 2 feet in length; and appears to have been simply heaped up, and not built into a vertical wall. Two other stone circles were visited by Lieutenant Mantell east of 'Ammân, within a quarter of a mile of one another; they were about 60 feet in diameter, with walls about 18 inches high; approaching more nearly to the circles which the modern Arabs form round the tombs of distinguished chiefs. In one of these circles, and in that at Hadânieh, a central wall along the diameter divides the interior into two portions. The only use which the Arabs could suggest for these structures was that they were formerly "theatres." They recognize, however, their similarity to the sacred enclosures where they now keep their property above the tomb of an ancestor, and liken the altar gates of their own structures to the cromlechs or *Bâit el Ghûl*.

The pillars mentioned at the commencement of this report are called *Serâbît* by the Arabs. The first which we observed was apparently a menhir, 6 feet high, and 2 feet thick at the bottom, tapering slightly and

supported by a column stump on one side. It stands all alone south-east of the ruins of *el 'Al* (Elealah).

Another in the ruined village of *Kufeir Abi Ṣarbût* is more doubtful, as it may only be a column shaft much worn by time. It is 8 feet high and about 3 feet 9 inches in diameter. It stands at the east end of a sort of courtyard, and no remains of capital or base were found in connection with it. Two other groups west of Hesbân are known as Serâbît el Mushukker and Serâbît el Muhattah. In the one case there are eleven or twelve pillars in a group, but without any particular arrangement; in the other there are about a couple of dozen. The shaft is about 1½ to 2 feet in diameter and 3 to 8 feet in height. A square base, about 2 feet to 2 feet 3 inches wide and 1½ foot high, is cut out of the same block with the column. No remains of any building occurs in either case, but the *Hajr el Mena* above noticed is close by. The pillars might be taken for Roman milestones; but there is no road near them, and the situation is one not likely to have been chosen by Roman engineers for a line of communication. This connection with the "wishing stone" seems to suggest that they may have been monuments of the same class with the menhirs, but constructed by more civilized tribes.

The great cairns found in connection with the rude stone monuments are few in number. They are to be found generally on the tops of hills, round the sides of which the dolmens are grouped; they are of very various shapes, some high, some very flat, and are composed as a rule of stones from 1 foot to 2 feet across, not shaped, but merely gathered from the ground.

The disk-stones referred to in the first paragraph are three in number, and are much like millstones in appearance. Their great size and the absence of any remains of a foundation or other parts of a mill in their vicinity is, however, a reason for regarding them as having some other purpose. The first at Kufeir Abu Bedd ("little village of the millstone") is 9 feet 6 inches in diameter, and 1 foot 4 inches thick. It stands up in the middle of the ruins, having been sunk to a depth of 3 feet in the ground; it has no hole in the centre such as is found in ordinary millstones, which are from 2 feet to 4 feet in diameter. The second disk-stone at el Kueijîyeh is 6 feet in diameter, and has also no hole in the centre.

The third stone is yet more remarkable; it lies in the Ghor south of Kefrein, beside a thorn tree; it is 10½ feet in diameter, and 3 feet 6 inches thick, being far too large and heavy ever to have been used as a millstone. It is pierced by a cylindrical hole in the middle, 2 feet in diameter. The Arabs call it *Mensef Abu Zeid* "the dish of Abu Zeid," and relate that this mythical hero (one of the black champions of the time before the Prophet) here sacrificed a whole camel, which he gave as a feast to the local Arabs when he was about to leave the Ghôr. The rice was heaped over the camel on the stone in a pile, which must have been 10 feet high, while the *Semen* or melted butter ran down the hole in the middle—a royal feast on a round table, which calls to mind the legend of Arthur in a very suggestive manner.

A few words must now be devoted to the dolmens or cromlechs, which form by far the largest group of the rude stone monuments in Moab. At the Maslûbîyeh group I measured and examined every specimen I found, amounting to 146 in all. The measurements are reduced to a tabular form, and sketches were taken of every monument which remains standing uninjured. Our treatment of the Hesbân and Sûmia groups, and of those at 'Ammâns was equally exhaustive; but time did not allow of our attempting excavations, and at el Mareighât and Kefrein we were only able to measure a few selected specimens. It would be most interesting to give further attention to the dolmens, especially to those which have floor stones, for the raising of these great slabs might reveal ancient sepulchres and lead to the recovery of prehistoric remains of a most important character.

The dolmens consist of three, four, five, or six stones; the simplest are those with a table-stone supported on two stone legs. They are in very many cases closed by a stone at one end, and in others they have a floor-stone in addition. One specimen which we found was a large and carefully constructed monument, a perfect chest with top, sides, ends, and floor stone. In size the dolmens vary extremely, from 2 to 6 feet in height, and from 4 feet to 14 feet in breadth of the table-stone. The finish of the work is also very different in the various groups; those at el Mareighât and Maslûbîyeh consist in many cases of stones which have evidently been rudely dressed; and very small stones are introduced between the side stones and end stone, so as to prop the former up more nearly vertical. At 'Ammân most of the dolmens are of flint-conglomerate; in the Jordan valley they are smaller and ruder, being made of dark metamorphic limestone, which is very hard and rough.

But although the gate-like or box-shaped monument is the most typical, it is by no means the only form which occurs in the large groups examined; there are many smaller specimens in which the table stone is supported not by two legs but by stones of smaller size irregularly piled up; in some cases one end rests on the ground, on the steep slope of a hill side, while on the lower side stones are built up high enough to make the top of the table-stone fairly horizontal. It is easy to distinguish these structures from the fallen dolmens of the larger class. Simpler still are the specimens which are to be found at Hesbân, 'Ammân, and el Maslûbîyeh, where a single stone, perhaps only 4 feet long, is propped up by one little stone 8 inches to a foot high. These small tables are nevertheless as distinctly made by human agency as are the great trilithons which occur close to them.

The floor-stones suggest the existence of a grave beneath the dolmen, but in two instances where, by lying down and peeping under, it was possible to see beneath the floor-stone, it was found to lie on hard rock, and no appearance of a trench was seen. The majority of the dolmens, in fact, stand on naked rock, and show no signs of a grave. Many are too small to have contained a human figure within the monument itself, unless it were the body of a child, while the table-stones without side stones are

clearly not intended as sepulchres. The occurrence of the dolmen-gate to the circle of el Mareighât, taken in conjunction with the Arab custom of making a small trilithon, a kind of gate and altar combined, on the west side of their sacred circle, are indications of great interest; but the use of cromlechs as tombs in Western Europe must not be forgotten, and it is possible that the larger monuments with floor-stones may yet prove to be sepulchres.

The cup-shaped hollows are also a most interesting feature of these monuments. We have already seen one case of a menhir with such a hollow. The greater number of dolmens have hollows in the top stone. In many cases these might be thought to be merely worn by the rain, but in others they are very carefully shaped. One example at Sûmieh has five cups varying from 10 inches to 2 inches in diameter. Near el Kueijîyeh is another large dolmen, the top stone measuring 8½ feet by 5½ feet, and having 40 holes in all, of which the largest was 10 inches in diameter. Some of these hollows were arranged round the edge of the top surface of this stone; others, near the centre, were connected together by little channels leading towards the outer row of hollows. At 'Ammân a still more instructive example was noted, where the top stone measured 11 feet by 13 feet, with four large shallow basins formed in it; these varied from 2 feet to 1 foot in length, and were about 12 inches deep; a complete network of shallow channels led from the upper edge of the table-stone (which is tilted considerably out of the horizontal) to one hollow in the centre of the table. Traces of other channels were observed, and it seemed clear that the cups were intended to receive some fluid, poured on the stone and allowed to run down from the higher edge. In connection with this detail it is necessary to note that the table-stone of the dolmens is more usually tilted at a slight inclination from the horizontal than arranged quite flat, and this can hardly be accidental, since the side stones are often as before noted propped up in truly vertical position, by small pebbles introduced between the stones. In cases where the table-stone has been held up on one side only by small stones, the other end resting against the hill side, it would seem to have been a simple matter to ensure the horizontal position, but in nearly every case the table is more or less tilted, and this is specially noticeable in the great 'Ammân specimen, the channels of which have just been described, and which has a table-stone resting at one end on the rock surface of the hill, and so tilted as to make any liquid run down the existing channel to the central cup or pool.

Another indication must also not be forgotten, namely, that Lieutenant Kitchener, in 1877, found the name *Hajr ed Dumm* ("stone of blood") applied to a fine cromlech in Upper Galilee.

The cup-shaped hollows are not exclusively found in the table-stones, they often occur in the flat rock surface beside the monument, and in one case the floor-stone had a very well formed cup cut near one end. The Arabs still form such hollows in the rock, and use them as mortars for grinding gunpowder; but their excavations are larger than those near the cromlechs, and are black inside from the powder. Cup-shaped hollows

are common in Palestine on bare rocks, often far away from villages, and have puzzled the Survey Party for many years. They were thought to be small presses for wine, or mortars for pounding the gleanings of wheat which are threshed separately by the women. It is possible, however, that they mark the sites of former groups of dolmens which have been destroyed by the later settled population.

There are no indications of the dolmens having ever been covered by mounds of earth, or cairns of stone. Such cairns would require to be at least 20 feet high in many cases, and the number of cairns of this size still existing in Moab is very small. At el Maslûbîyeh, moreover, there is a line of some twenty dolmens all close together, almost touching each other. The cairn or mound necessary to cover all these would have been of enormous size, and not a trace of such a structure exists. In some cases, however, a circle of stones surrounds the dolmen, and Lieutenant Mantell discovered a group in the Jordan valley, in which every specimen stood on a sort of platform made by a circle of stones sunk flush with the present surface. Heaps of small stones here lay on the ground near the monuments sometimes touching the sides, while, as I have previously reported, heaps of stones and little pillars (Kehâkîr) are still erected by the Arabs in the vicinity of a group of "ghouls' houses" as they call them, just as they are piled up on fallen pillar shafts in any ruined building when held sacred, notably in the little shrine of Jerîyet 'Aly, near the Lake of Homs. The reason for these stone piles we may be able to conjecture immediately.

A few general remarks may be added to the above notes on the dolmens. They have no orientation, but, as Lieutenant Mantell pointed out, they are arranged with the length of the side stone parallel to the contour of the hill side, a position which must have made their construction less difficult, as the table-stone was no doubt slid down hill and pushed over from the nearer side stone to the further. This may also account for the fact that the dolmens appear never to have been built on the *top*, but always on the slope of the hill.

They do not seem to have any specially chosen position, but were rather placed where material was found ready to hand. Thus at 'Ain Jideid there are 156 cromlechs south and east of the spring, but only one on the north; the reason being that the dip of the strata is such that loose rocks and broken cliffs occur on the one side, but a steep uniform slope without cliff on the other. Nevertheless, the group of cromlechs, taken as a whole, seems in every case to be referable to a centre. At 'Ain Jideid this centre is found in the great stone-circle of Hidânieh, already noticed, just above the spring, while on the south the hill top is occupied by a great cairn, and the slopes thickly strewn with cromlechs, and on the east the isolated hill-top of Kueijîyeh with the disk-stone on the very top is in like manner encircled with dolmens.

The cromlechs in the large majority of cases are within easy view of the centre, though this is not quite an invariable rule. The centres occur on high tops, commanding in almost every case a fine view over the Jordan valley, and in every case situate in the immediate vicinity of a

fine stream or spring. In districts where no springs occur, no cromlechs are found, although suitable material could often have been obtained. In the case of el Mareighât the centre is formed by the group of *menhirs* on the knoll above the Zerka springs, for an amphitheatre of hill spurs is here occupied by cromlechs, commanding as a rule a view of the valley ; and in nearly every case within sight of the centre. The reason given by the Arabs for the erection of stone heaps near the cromlechs is that a view of Neby Mûsa, west of Jordan, is thence obtained ; but we found such heaps occasionally in connection with examples which were not in view of that sanctuary, and the explanation is probably more modern than the custom, and naturally results from the position of the groups within view of the Ghôr. The more intelligent Arabs are ashamed to call the cromlechs "ghouls' houses," but they are no doubt not less free than the rest from a superstitious fear of these places, which may arise from traditions such as still cling to our English Druidic remains.

I have already referred to the curious chambers cut in detached blocks of rock near the dolmen. As a rule they are not more than 4 or 5 feet long : in some cases the door was like that of an ordinary rock-tomb, and seems to have been closed by a slab. In a few cases the chamber within was from 6 to 7 feet long, and presented all the appearance of a single grave or *Koka*. The Arab graves do not resemble either the rock-chambers in question or the dolmens. Women and thieves are interred by piling a cairn of stones over their bodies, or by throwing them into a cave or pit. Many of the survey cairns covered the decaying corpses of women, or of men slain in a fight, or shot while stealing. The men of good position repose in an ordinary grave, dug in earth and provided with a stone at either end. These graves are oriented, and the faithful lies on his right side, with his face to Mecca. On the two end stones Munker and Nukr, like Isis and Nephtys in Egypt, will sit in judgment on his soul. A holy man has his tomb surrounded by a circle, with an altar gate placed on the west (except among the Zabi tribe from Haurân, who place the entrance on the south or east). The great Sheikhs (like the late Fendi el Fâîz, who lies buried in the Ghôr, amid his old enemies the 'Adwân, at the place where he died while on a journey) are covered by a monument of stone 10 feet high, the top being an apparent imitation of a sarcophagus lid. On the sides of such tombs, strictly in contradiction to Moslem custom, are sculptures rudely representing a horseman, a bow, a coffee-mill, with cups, spoon, and jug, thus symbolising alike the prowess and liberality of the defunct. After examining many sites, both east and west of Jordan, where a tomb is made by carving a rock sarcophagus on the top of an isolated rock knoll, so as to make a conspicuous monument with very little trouble, I cannot but think that the white Arab tombs, on the tops of tells, are imitations of the sarcophagus of the Greek or Roman period on its rocky height.

It is clear, therefore, that the cromlechs and the accompanying rock chambers have no connection with ordinary Arab graves. To return to the former, the cromlechs or dolmens were not found to contain any

sculptures, names, or inscriptions. A few Arab tribe-marks were found on one or two of the menhirs, and copied—they belong to tribes in the immediate vicinity, but the cromlechs were apparently quite without any sculpture either within or without. In the Roman tombs of 'Ammân, on the other hand, the tribe marks (some apparently very old) are carved as thickly as possible. I shall have occasion in a future report to explain why the Arabs place tribe-marks on certain buildings. They appear to be signs of "good luck," and it is therefore not unnatural that they should be absent from the "ghouls' houses," which are supposed to be far from propitious places.

To sum up the results of this rapid analysis of the Moabite rude stone monuments, so far as they themselves indicate their own origin. We find stone *cippi* of two kinds, one upright, from 4 to 12 feet high, the other cubical, and generally surrounded by a stone circle. These are both rare, and the only places where they occur in numbers are at al Mareighât and 'Ain Minyeh respectively, or within three miles of one another. There are, however, a few others south of the Zerka M'aîn, as yet not visited, including, I believe, a monument not unlike Stonehenge, in Wâdy Wâleh. The disk-stones, the groups of rude *tums* or *hermai*, and the single menhirs, are also not numerous, while the cairns and circles are found in greater numbers, according to Canon Tristram, south of the Zerka M'aîn. The dolmens occur at certain sites by hundreds, and from their position and numbers and their floor-stones in some cases, together with the use (or re-use) of dolmens as tombs in Europe, may be regarded as representing prehistoric cemeteries, near sacred hills and springs. On the other hand, it is clear that many of them are merely tables or rude altar stones propped up for the offering of victims, and that the cup-shaped hollows with the channels are most probably intended for libations of wine, or of blood, poured over the slanting surface of the table-stone. The use of diminutive dolmens among the Arabs as gates to sacred circles, and the occurrence of such a gate at el Mareighât, must also be borne in mind; and the connection of the Galilean specimen with the idea of a bloody sacrifice.

It must, however, here be noted that the Moslem tombs in all Syria have in their roofs or flat tops two cup-shaped hollows, sometimes enlarged and filled with mould (in which roses or other flowers are grown), but generally small, and containing only a little dew or rain water, for thirsty birds or the sacred doves, whom the deceased is thus able to show charity towards even after his death. It is very remarkable that this custom is also still prevalent in Brittany among the Christian peasantry; or just in one of these districts where some of the finest specimens of European dolmens with cup-shaped hollows occur.

By glancing at the history of stone monuments in the East, we may, however, be able to understand better the origin of those found in Moab. The following notes are due to a study of the works of Sir William Muir, M. F. Lenormant, and other Oriental authorities; but I am unfortunately unable at the present moment to consult Mr. J. Fergusson's beautiful book

on rude stone monuments, having left the book in England. I hope to be able to correct and supplement this report at a future period, after reference to this great architectural authority.

It is a fact beyond dispute that the Arabs before the time of Mohammed consecrated stones as idols, or emblems of their divinities. To these monuments they gave the name *Nusb* (Pl. *Ansâb*), which is the same title still applied to the great menhir called Hajr Mansub, and radically connected with the Hebrew מצבה or "pillar," such as that which Jacob anointed with oil (Gen. xxxviii, 18), or the "great stone" which Joshua set up near Shechem under an oak (Josh. xxiv, 26), which is mentioned later as the "oak of the *pillar* that was in Shechem" (Judges ix, 6). The black stone of Venus at Mecca, and the red stone of her companion Hobal, the stones of Asâf and Nailah, and that of Khalasah, near the Kabah, are among the most famous Arab examples, and it is very remarkable that the red stone of Hobal is said to have been actually brought from the Belka, that is from Moab to Mecca.

Such stone worship was, moreover, of great antiquity in Arabia. The Nabatheans at Petra worshipped a square black stone before the Christian era, and Herodotus (iii, 8) speaks of seven stones which the Arabs swore by and sprinkled with blood. Antoninus Martyr (600 A.D.) was shown such a stone in Horeb, and the existing *Sakhrah* at Jerusalem must not be forgotten, for the Arabs consecrated both rocks and cubical stones alike to *Allât* or *Mena*.

Seven stones stood once in the valley of Mena, where three still form part of the objects of Haj ritual. Seven stones also surrounded the Kaabah, and Arab authorities state that they were smeared with the blood of sacrifices—a practice mentioned in early Arab poetry, while it is also alluded to by Herodotus. Bishop Porphyry, of Gaza, in the 5th century, says that the Arabs of Duma used annually to sacrifice a child and bury it at the foot of a *cippus*. It appears probable, therefore, that the human sacrifices which we read of in Moab at so late a period continued to be offered in Arabia almost as late as the time of Mohammed.

The worship of stones, especially *cippi*, can be carried back, however, much further. Pagan customs, which date back 3000 B.C., continued to be observed in Palestine until at least the 6th century A.D. Marna at Gaza (whose statue was lately found) was worshipped as late as 500 A.D., and we hear of the worship of Venus at Ascalon and Accho (in the Talmud) down to the same period. Tammuz had a grove at Bethlehem in the fourth century A.D. The sacred fishes of Venus are still held sacred at Acre and at Tripoli, and human sacrifice is still said to exist among the Perso-Gnostic sects of Northern Syria, who have stone altars still existing in sacred groves, like those of the Druids of our own country. In the same way the Arab stone worship can be traced back to Assyria, for in the temple of Oruk, in Chaldea, seven black stones are noticed, in a cuneiform text, as having been worshipped. Among the Phœnicians the "stones with souls," called *Bætulia*, formed an important religious feature, and appear to have been, like the Arab stone monuments, at once idol and altar. Two

"ambrosial" stones are mentioned on Phœnician coins, and were believed to exist under the sea near Tyre.

Greece adopted stone idols from Asia, as she adopted many other Asiatic emblems, and the stone of Hermes formed the original prototype of the beautiful statuary of Athens. At Seleucia, near Antioch, were found the "lapides qui divi dicuntur," and at Emesa and Laodicea black stones were adored. The "stone which fell from Heaven" at Ephesus is mentioned in the New Testament.

The ancient Arabs worshipped only two deities in common—one male, one female—amid many others peculiar to various tribes. These two, *Allah* and *Allât*, representing Saturn and Jupiter on one side, Venus and the moon on the other, were symbolised by two different kinds of stone monuments. Those of the male deity were *cippi* or standing stones with a rounded summit, those of the female deity were cubical blocks. Thus at the Taif sanctuary a white cubical stone symbolised *Allât*, while in Greece the same distinction existed between the pillar of Hermes and the cubical stone of Cybele.

It appears, therefore, that the two kinds of monuments found near one another at al Mareighât and at Minyeh answer exactly to the two varieties of stones worshipped by the ancient Pagans. The cup-shaped hollow in the *cippus* at 'Ammân is a most interesting feature in connection with the libations of blood poured over such stones; and the name Mareighât, "smeared," may refer to this practice, though the connection of the site with a tradition of an oil-press may rather suggest that they were smeared with oil, reminding us of Jacob's stone of Bethel, of the ambrosial stones of Tyre, and of similar "stones of unction" in India not less than in Jerusalem. But we see further that these monuments may have been erected long before the time of Arab history, and may quite well belong to the old idolatry of Moab; for the Arabs of the district, though belonging to one of the oldest of the Belka tribes, have apparently no tradition in connection with these monuments, and have no veneration for them.

The *cippus* was the proper emblem of the Moabite deity Baal Peor, who with the female Asherah answers in general character to the Arab Allah and Allât. The ritual of his worship, as described by Maimonides, has striking analogies with the worship of the stones Asaf and Nailah before the time of Islam, and although the name of Baal Peor no longer survives, it would appear most proper to assign him a sanctuary at the only site in Moab where the *cippi* occur in great numbers.

The name Minyeh, and the existence of seven cubical stones in circles at the spot, alike point to this locality—only three miles distant from the fomer—as being sacred to a female deity like the Asherah or "grove,"—the couple of Baal Peor. The name *Meni* is one of the titles of *Allât* or Venus among the early Arabs.

Meni and Gad appear as an idolatrous couple in the Bible (Is. lxv, 11), answering to the two "fortunes" of ancient mythology, Jupiter and Venus To them the Israelites "prepared a table" (perhaps a rude stone altar), and

"furnished a drink offering" (perhaps of blood), and it is striking to find the name Jideid, from the root *Jedd* (approaching the name Gad), applying to the next great group of rude stone monuments that occur north of Minyeh. The name Minai, or "Venus worshippers" (enchanters and fortune tellers), was applied by the Jews to various heretical sects, and to the Christians of Capernaum, as I have shown in "Tent Work in Palestine." The moon was adored at a sacred rock near Medineh, under the name *Menât*, from the same root, and the sacred stone of Khalasah ("refuge") near Mecca, stood in the valley of *Mena*. We have also seen that the stone of *Mena*, or "desire," is of the kind symbolising the female deity *Allât*, and occurring in connection with *cippi* north of Minyeh. The recesses in the sides of these stones, described on an earlier page, seem to resemble the little niches in sacred caves in Palestine, where the peasants place figs, pomegranate blossoms, fragments of blue earthenware or glass, as offerings to the local divinity. It was the male deity to whom bloody sacrifices were offered, and we find no cup-shaped hollows in the cubical stones, though they occur sometimes on neighbouring rocks.

It may be thought that the *cippi* thus described are perhaps only boundary stones, but the connection between such stones and the old stone idols is very close. The *hermæ*, which formed the earliest mile-stones, were but emblems of Hermes (the nocturnal deity), and the stone of Ebenezer, even in the Bible, was at once a sacred monument, and a boundary of the country conquered from the Philistines.

It appears, therefore, probable from a study of existing names and monuments, that the sites of Mareighât and Minyeh represent two ancient centres of the worship of Baal and Ashtoreth, of Baal Peor and Asherah.

There is another curious name in this vicinity, viz., el Maslûbîyeh, the hill south of 'Ain Jideid, which is covered with dolmens. It signifies "crucifixion," and is not understood by the Arabs, so far as we could ascertain. There is a good deal which is curious in connection with crosses east of Jordan. One Arab tribe of the Beni Sakhr clan, are said to have a cross for their tribe mark. At 'Ammân I found a slab with a large Byzantine cross in a circle carefully placed in the side of an Arab tomb as an ornament (which is quite contrary to ordinary Moslem ideas). At Hesbân, also, we found a head-stone to a modern grave, ornamented with a rude bust having a cross beneath, apparently Bedawin work. Considering, however, the early conversion of the Beni Ghassan Arabs of the Haurân to Christianity; the remains of so many Byzantine ruins in the Belka (although with most remarkably few churches); and the survival of a Greek congregation at Kerch, holding the most extraordinary views of their own, it seems probable that the name Maslûbîyeh is of Christian origin, and connected with the great lintel bearing a Greek cross, which lies in the valley to the north close to 'Ain Jideid.

The stone circles which have been noticed above resemble those found by Palgrave in Arabia, of which one in Jebel Shomer was connected with the astronomical cult of Dârim. A similar cromlech is said to exist on the

Eleusinian, viâ Sacra, and it is very curious that the term "gal-gal" is applied in Brittany to heaps of rolled stones near cromlechs. A learned authority in Edinburgh has lately written to point out to me the connection between the trilithon dolmens and the "sacred gates" of Eastern Asia, with the stones beneath or between which the superstitious still crawl in Germany, and thus with "wishing gates" (as in the Lake District), and with the pillars, in the Jerusalem Haram and elsewhere, between which the believer must squeeze in order to attain to Paradise. This is a very abstruse mythological question, the meaning of the ceremony being, however, made clear by students of Indian and Egyptian myths, but it is sufficient here to point out that the miniature cromlech is still used as the door of the sacred enclosure by the Arabs, and that a cromlech adjoins the circle at el Mareighât in a precisely similar manner.

The doors of the modern circles are, however, used as altars as well, and when we consider the structure of those monuments already described, with tilted table-stones and channels leading to cup-shaped hollows, it seems only natural to conclude that many, if not all, the rude stone monuments with a broad "table" or top stone were used—if not originally constructed—as altars. That human sacrifices were most probably offered on the dolmens, and that the "blood which is the life" of the victim was collected in the hollows, and perhaps served to sprinkle the congregation.

The use of great stones for the sacrifice of animals is mentioned in the Old Testament, when Saul commanded, "roll a great stone unto me this day" (1 Sam. xiv, 33), the people having transgressed in their hunger by eating "with the blood;" and it seems not impossible that this stone was the altar mentioned immediately after, as built by Saul to Jehovah.

The cup-shaped hollows are, however, found as before stated on modern tombs. In Finland, a great stone was believed to exist on some mythical hill, wherein were hollows into which the magician charmed the diseases of his patients. In the face of learned opinion, which is in favour of the theory that dolmens were originally used as tombs, and in face of the fact that they are actually found to have been used as such in Brittany, it may appear bold to revert to the idea that dolmens were altars, but we know that human sacrifices to the Manes were often offered on tombs—as is mentioned in the Iliad, and this may perhaps serve to reconcile the two views in a certain degree. The Moabite dolmens, however, do not seem to show much evidence of having been tombs, while in many cases—at all events, as regards the flat slabs, propped up on one side, they present exactly the appearance of such a "table" as was spread to Gad, or to the savage Chemosh of Dibon, pacified by the blood of human victims.

I have written fully on the question of these monuments, not only on account of the interest of the subject, but also in support of the view put forward in a previous report on Nebo, in which I suggested that the dolmens on Nebo might have some connection with the story of Balaam and Balak—an idea which might perhaps be thought to be a hasty

surmise. Considering how constantly the seven stones appear in Assyrian, Phœnician, and Arab Pagan ritual as seven altars (sometimes with an eighth of larger size), it is not unnatural to connect the seven altar-like structures which still remain on the high place of Minyeh, with the seven altars built on each of those heights in succession by Balak. They were constructed rapidly, and from materials on the spot, and they stood on the slopes apparently, and not on the tops of the hills. The seven cubical stones at Minyeh seem undoubtedly to have belonged to the worship of seven planets, and of the great goddess Allât, the chief of all. In the ceremonies of the Haj, the number (seven) in the same way continually recurs in every action of the pilgrim, and the seven stones are found in Assyria from the earliest times of planetary worship.

Another very curious question relates to the cairns and to the piles of stones found round some of the cromlechs, as well as beside many roads in Palestine and Syria, for it refers to one of the most curious, and perhaps inexplicable peculiarities of the Semitic idolatry and of Greek mythology.

St. Jerome, in translating the words "as he that bindeth a stone in a sling, so is he that giveth honour to a fool" (Prov. xxvi, 8), by the expression, "Like him who throws a stone on the back of Mercury," has shown an intimate acquaintance with Semitic idolatry—surviving in his own days at Bethlehem—and has supplied a very forcible parallel which is missed in the English text: for the worship of a deity by throwing stones at him seems a very senseless worship, but is nevertheless alluded to very often in the Talmud, and by Maimonides (on Aboda Zarah, &c.). The Rabbis use the expression *Marculim*—a corruption of Mercury—as the name of the deity thus worshipped. The Hebrew בִּמַרְגֵּמָה rendered "in a sling," is more probably "on a heap;" and the name *Merjemeh*, in Palestine, still denotes a hill-top covered with a cairn. Maimonides says that Markulim was worshipped by "throwing little stones," and in Greece, a heap of stones by a wayside was called Hermaion, in memory of the stones thrown by the Gods at Hermes when he killed Argus. The throwing of stones was the last ceremony of the Eleusinian mysteries, and of other feasts, and the same practice is observed to the present day, for the Jews throw stones at the so-called tomb of Absalom near Jerusalem, and the Mecca pilgrims throw stones at the three surviving stone monuments in the valley of Mena—in memory, they say, of the stones thrown at Eblis by Abraham, or by Adam, in this same valley. It may be noted that it is always a nocturnal or infernal deity to whom this rite attaches. Herm es was the Vedic Saramaya (according to Gubernatis), the watch-dog of night and Hell—the messenger of the gods. Eblis is the Arab satan, and the stone heaps near Horus commemorate the grave of the black slave of Imâm 'Aly. To the old stone deity who swallowed stones, stones were a not inappropriate offering, and the Arabs still place small pieces of basalt, or coloured sandstone, as an offering on their small gate altars.

The *cippus* formed the nucleus round which these stone offerings

collected, and gradually a cairn was formed which covered the original stone.

It is instructive to notice, therefore, the enormous cairns which cover the summits of Jebel Neba and Jebel Attârûs, both apparently bearing the names of the Assyrian Mercury, while the small stone pillars near the cromlechs, and the heaps of small stones, sometimes surrounding these structures, and sometimes piled beside a road in their vicinity, may perhaps be attributed to the same origin. That they have been artificially collected at the spot there is no doubt, while at the same time it is tolerably certain that they never existed in sufficient numbers to form cairns covering the cromlechs.

A few words may, in conclusion, be said respecting the identification of the three great centres of rude stone monuments south of Hesbân, namely, at el Maslûbîyeh above Wâdy Jideid at el Mareighât, and at Minyeh, and of that in the Ghôr near Kefrein. The first, I am inclined to suppose, represents the Bamoth Baal of the Old Testament; the second Baal Peor; the third, the "top of Baal Peor which looketh towards Jeshimon;" and the fourth, the sanctuary of Baal Peor in the Jordan valley, where the Israelites worshipped while in Shittim. Excluding the smaller centres belonging to Heshbon—which had naturally its own sacred places, there are just four centres in this part of Moab, and all four are mentioned in the Bible, which, moreover, does not appear to refer to any more centres of Baal worship in this district.

Nebo, Bamoth Baal, and the western top of Peor, were the three heights whence Balaam is related to have looked down on Israel. Of these Nebo is fortunately fixed by the survival of the names *Neba* and *Sufa* (for Zophim); but no satisfactory suggestion seems to have been yet made for the other two sites. Bamoth Baal has, indeed, been placed by one writer at Maîn; but this is an unfortunate suggestion, because the ridge west of that place entirely hides out the view even of the cis-Jordanic hills, and no view of the Ghôr can be obtained until the ridge has been followed westward about five miles. An impossible site has also been suggested for Baal Peor in the Speaker's Commentary at *Naûr*, which is much too far north to suit the Biblical description.

The relative position of the three high places can be pretty clearly deduced from a comparison of the various passages in which they are mentioned. Bamoth Baal was one of those stations at which the Israelites halted on their way from Arnon to the vicinity of Mount Nebo. The distance is some twenty miles between these extreme points, and is divided into five marches, averaging only four miles each. This may appear a very short day's journey, but considering that it was an advance in an enemy's country which is described (Num. xxi, 13-20), encumbered by flocks and herds, women and children, tents and baggage, it appears a very probable rate of progress. It would have been controlled also by the question of water supply, and practically it represents just about the distance which an Arab tribe of the present day will march in changing their encampments according to the seasons. It may be remarked in

passing, that this rate of progress forms a striking comment on the theory of Dr. Brugsch, which would make the Israelites march no less than *forty* miles in one day when leaving Egypt.

The last but one of the five marches brought the Israelites to Bamoth ("the high place"), which is presumably the Bamoth Baal of the later episode. It is specially described as *Bamoth ha gia*, "Bamoth of the ravine" (verse 20), and should be placed four or five miles south of the western extremity of the Nebo ridge, "the top of Pisgah which looketh towards Jeshimon." The identification of the remaining stations serves to confirm this conclusion, for, after leaving Arnon, the Israelites are said to have halted successively at Beer, Mattanah, Nahaliel ("the valley of God"), Beer ("the well") appears from another passage to have been Dibon (xxxiii, 45), between which and the position of Bamoth Baal there are two principal valleys to be crossed, each containing a fine perennial stream, namely, Wâdy Wâleh, which we may identify with Mattanah, and the Zerka Maîn, which would represent Nahaliel, "the valley of God." The route thus suggested is the main high road from Kerak northwards, which the Israelites only leave when diverting their steps to the main road leading down past Nebo to the plains of Shittim. The route would consequently be as follows:—

Hebrew.	Arabic.	Miles.	Water Supply.
Arnon	*Wâdy Mojib*	0	Stream in valley.
Beer	*Dhibân*	3	A spring well (see Num. xxi, 18).
Mattanah	*Wâdy Wâleh*	4	Stream in valley.
Nahaliel	*W. Zerka Maîn*	5	„ „
Bamoth Baal	*Wâdy Jideid*	5	„ „
Pisgah	*Siâghah*	4	Springs of 'Ayûn Musa.

The valley by the "high places" (Bamoth) would thus be Wâdy Jideid, which is a great ravine, answering well to the description *Gia* in the Hebrew.

Baal Peor is not mentioned in connection with this route; it was therefore apparently not on the line of march, and, indeed, it seems clearly to have been further west, because in an enumeration of the towns of Moab, it occurs in the same group with Ashdoth, Pisgah ('Ayûn Mûsa), and Beth Jeshimoth (Sûlimeh in the Jordan valley). It is closely connected with Beth Jeshimoth in other passages, for Israel while approaching the Jordan valley is described as "in the valley over against Beth Peor, (בגיא מול בית פעור) and their camps extended, as we have from another passage (Num. xxxiii, 49), "from Beth Jeshimoth to Abel Shittim," by which latter the later Jewish commentators understand Kefrein to be intended. They spread, in fact, over all the fertile basin of the Ghôr es Seisebân opposite to the corresponding plains of Jericho. Whether the valley over against Beth Peor is the same as that valley in which Moses

was buried, to which the same description (with exactly the same Hebrew words) is applied (Deut. xxxiv, 6), is an interesting question.

In the account of Balaam's visit to Baal Peor there is another indication of importance. From the top of Pisgah he saw only a part of the Israelite encampments (Num. xxiii, 13-14), from Bamoth Baal he also saw only a part of the people (xxii, 41), but from Baal Peor we may infer that since setting his face towards the wilderness (Midbar), he "saw Israel abiding in his tents, according to his tribes," the whole of the encampments were in view (xxiv, 2). This point of view is, moreover, described as the "top of Peor that looketh towards Jeshimon" (xxiii, 28), and Jeshimon we know from the history of David, to have been the desert west of the Dead Sea. The place whence Moses is said to have viewed the Promised Land was "the top of Pisgah, over against Jericho" (Deut. xxxiv), and these careful descriptions appear to give the *latitudes* of the two ridges of Nebo and Peor. This western top of Peor is also called הנשקף, "that which looks out" or "projects" towards (Desenim), which applies well to this prominent spur.

If this strict interpretation of the Biblical expressions be correct, we have the following data for fixing the site of the Peor ridge :—

1. It must extend far enough west to command a view of all the Ghôr es Seisebân, including the vicinity of Sulimeh (Beth Jeshimoth).

2. It must be south of the latitude of the Jericho plains, so as to be east of the Jeshimon or Western desert.

3. It must still be in the vicinity of the springs of Pisgah (Ashdoth Pisgah), and of the valley where Israel encamped when debouching into the Ghôr from the Nebo ridge.

4. It must not be on the line of the Israelite march to Nebo from Arnon.

These requirements are all met by the site of Minyeh, where the seven stone altars occur. It is distant about 7 miles south-west of Nebo, and between the two is the lofty ridge of the Maslûbîyeh, rising immediately above 'Ain Jideid, and distant at its highest summit 3¼ miles from Siâghah, the western end of the Nebo ridge. From Nebo or Siâghah, and from Maslûbîyeh, the greater part of the Ghôr es Seisebân (or plain of Shittim) is seen, but neither commands so extensive a view as does the Minyeh ridge, because the latter pushes out further west, and because a great shelf or lower plateau, which extends from the Dead Sea cliff eastwards to the foot of the higher ridges, hides out the vicinity of Beth Jeshimoth ('Ain Sulimeh) from the northern points of view. At Minyeh the traveller looks over this shelf, and the green patch surrounding 'Ain Sûlimeh is clearly seen. From Siâghah or Neba, and from Maslûbîyeh, therefore, only part of the Israelite host would be seen, while from Minyeh the whole host would be descried.

We are thus able by arguments quite independent of each other, to indicate the probable position of Nebo (where the name is preserved) of Bamoth Baal (the halting place immediately south of Nebo) and of Baal

Peor (from its latitude and its view), on the three successive ridges which may be seen running out one beyond the other on the south and south-east as one stands in the Ghôr at Kefrein, namely, those spurs which are now known as Siâghah or Neba, Maslûbîyeh, and Minyeh.

As regards the modern names, Siâghah is identical with Seath, which the Targum of Onkelos substitutes for Nebo. Maslûbîyeh is a name probably of Christian origin, but the name Jideid applying to the valley on the north may indicate an old title, Baal Gad, applying to this high ridge. Minyeh we have seen to be derived from Meni, the name of a goddess, whose symbol was the Asherah, or grove, who was the proper couple of Baal-Peor, and was also connected in another aspect (that of "fortune" as contrasted with that of "desire") with Baal Gad. It is possible, also, that the specification of a particular *Rosh* or "top" in connection with Peor and with Nebo, may be due to the existence of two sites on either ridge which might be confused. Thus the top of Pisgah whence Moses viewed the land "over against Jericho" is distinct, as many writers have pointed out, from the actual summit of Nebo to the east, and is to be placed at Siâghah. In the same way we may take the "top of Peor over against Jeshimon" as distinct from Beth Peor itself, and we find, as has been pointed out earlier, two sites on this ridge, one at Minyeh, and the second further east, at the curious sacred place of el Mareighât, which was probably not visited by Balak for the simple reason that it has no view over the Jordan valley.

As regards the valley "over against Beth Peor" where Moses was buried, the Targum of Onkelos believed it to be near Seath or Siâghah, and these two indications, together with that given by the fact that the Israelites encamped in this ravine when marching towards the plains of Shittim, may perhaps be best reconciled by supposing Wâdy Jideid to be intended.

There appears to be a reason, moreover, why three places should have been successively visited by Balaam. The Canaanite mythology seems, like that of Phœnicia or Egypt, Assyria or India, to have recognized a triad of divinities, one the representative of Chronos or Ouranos, an ancient and wrathful deity (Moloch, Milcorn or Chemosh, Anu, Eliun, Brahma), appeased by human sacrifice and worshipped at cairns of stone; the second female (Astoreth or Asherah, Ea, Istar, Astarte or Vishnu), whose shrines were circles with stones of cubical form; the third a younger deity, often identified with the Sun (Peor, Tammuz, Adonis, or Siva), to whom the menhir or *cippus* was specially consecrated. The shrine of each of these was visited in turn, Nebo being consecrated to Moloch, Bamoth Baal to Baal Gad or Baal Peor, and Minyeh on the western top of Peor to Ashtoreth or Meni. At each of these places the seven planetary deities who, in the Chaldean system grouped beneath the great triad, were invoked, and at each place probably the form of altar or of idol would differ.

It cannot but be considered very striking, that the three sites thus indicated as representing the three high places of Balak and Balaam, should

prove to be the very places where stone altars, dolmens, and menhirs are now found. If the dolmens were altars, it is evident that the Moabites must have had the custom which we know to have prevailed among the Israelites in Saul's time, of building a fresh altar on every occasion of a great sacrifice on the spot, just as Balak built his altars at command of Balaam.

If some of these monuments must be regarded as tombs (although it seems impossible that all of the table stone structures can have had this purpose), it seems that the great men of the tribes must have been buried at sacred centres, just as the modern Arab graves are gathered round some venerated shrine, and that the table stones served as altars on which sacrifices to the Manes were offered, just as the modern altar gate serves for offerings at the modern Arab grave of a holy man. It is impossible to point out, perhaps, the very altars erected at the three "high places" by Balak among the countless monuments which are to be found at these places, but there appears good evidence to show that it is to rude stone monuments of this kind, and at these sites, that the Biblical narrative refers.

A few words must finally be devoted to the remaining group of rude stone monuments in the plains of Shittim. These also seem to be mentioned in the Bible. When Israel abode in Shittim they were tempted by the daughters of Moab to worship the Moabite gods (Num. xxv, 1-3). Baal Peor is explicitly mentioned, and the clear reference to the *hierodoulai* (Kodeshoth), who were specially consecrated in Phœnicia, in Assyria, and even among the earliest Accadians or Chaldeans to the goddess Ishtar, makes it evident that Asherah or Meni was one of the idols whom they were induced to worship.

We can, however, hardly imagine that they returned to the shrines of Peor or Meni on the mountain tops, and seek rather for some high place close to the plains of Shittim. This we find in the rude stone monuments which cover the lower spurs between Wâdy Kefrein and Wâdy Hesbân, where among the dolmens we have discovered a circle with a cubical stone altar such as was dedicated to Meni, and at least one, if not more, of the *cippi* which symbolized Peor.

Leaving these considerations for the judgment of the readers of this report, I will in conclusion only urge that there appears to be enough evidence to make this question of more than mere antiquarian interest.

In a future report I shall endeavour to collect and explain the numerous traditions and tales which we found current among the Arabs of Moab, with the origin and affinities of their tribe marks and of some of their customs.

I have also to give an account of our discoveries at 'Ammân and 'Arâk el Emîr, and of the results of two long visits paid to the Siloam tunnel since our return west of Jordan.

C. R. C.

XI.

On some Arab Folk-lore Tales.

Jerusalem, 10*th January*, 1882.

Among the objects included in the original prospectus of the Fund, was the collection of native traditions in Palestine, together with the manners and customs of the peasantry. This was a subject to which Mr. Tyrwhitt Drake gave constant attention, and concerning which M. Clermont Ganneau has given many valuable indications. An attempt to give a general sketch of the subject is made in the last chapters of "Tent Work in Palestine," and in some of the special papers published in the Memoirs of the Western Survey. We were, however, always somewhat disappointed at the scarcity of traditions which we were able to collect, and at the uninteresting character of those related by the Fellahin. This may be due in part to the unwillingness of the peasantry to repeat stories which most of the Franks in the country treat with ridicule, or to the fact that the knowledge of such legends is confined to a few old men and women, and is gradually dying out; but the results of careful inquiry during the present year have convinced me that the main reason is that myths, legends, and folk-lore tales are not widely spread or popular among the Fellahin, and I hope to be able in the present report to show the reasons of this deficiency.

As soon as the 'Adwân and other Arabs east of Jordan, among whom we have been living for three months, became aware that we were interested in their traditions, and received their stories without laughing at them, they became very communicative, and related various tales to be mentioned immediately; but during the spring I attempted, by the same treatment, to induce the Fellahin to relate legends of their sacred places with signal want of success, for although the Sheiks and others thus interrogated were very well disposed, they seemed unable to give any more information than is found in the bare names of places such as "Noah's ark," "Samson's tomb," &c., while some stories which have been supposed genuine native myths turn out, on careful examination, to have been originally related to the peasantry by educated Christians, forming quite modern perversions of the Biblical narrative.

The first story related by the 'Adwân is connected with the spring called 'Ain Jideid, on the south side of Mount Nebo. Here in a deep valley surrounded by cromlechs, and with an enormous stone circle on the cliff above, is a clear brook flowing out from beneath a group of great boulders. Close to the source is a lintel stone with a Greek cross, perhaps brought down from the neighbouring church at the ruin of Siâghah. On a rock a little to the north is a rude Arabic inscription. The legend relates that a young beauty named Ghareiseh ("palm") loved a young man named Zeid ("increase"), who belonged to a tribe of

local Arabs which was in hereditary feud with her own. At the spring of 'Ain Jidead they used to meet, and here she arranged to fly with her lover, whom she concealed in a box placed on a camel. His relations, however, became suspicious, owing to some peculiarity or movement (I could not quite understand which) of the box, and on opening it and finding the concealed youth, they became furious and killed both the lovers on the spot; Ghareiseh before her death, however, managed to scrawl on the rock the existing writing (which the Arabs cannot read, and which appears only to be a rough enumeration of proper names barely legible in a few parts) while, as she fell her hand rested on the lintel stone, and imprinted on its hard surface the well-cut cross and circle which to the sceptic appear to have been the work of a Byzantine mason.*

The impression of the hand on rock is an idea commonly found in Palestine, and not less in India: in the finger print of Gabriel on the sacred rock at Jerusalem, among Moslems, not less than in those sacred footprints in Jerusalem, and the numerous prints of hands, heads, and bodies, which are shown by the Latin monks at Nazareth or 'Ain Kârim.

The footprint of the Prophet on the Sakhrah is known to have been shown in the 12th century as that of Christ, but the idea is not exclusively Christian (or rather Monkish), for without considering the foot of Buddha in India, we have a sacred footprint in the mosque at Baalbek, and another in Moab, which has been previously noted by Colonel Warren.

This latter example can hardly owe its origin to the monks, and is of peculiar interest, occurring beside the main road from Heshbon to Kerak, not far from Nebo. It is not surrounded or covered by any buildings, and its position is only marked by two small piles of stones, one on each side. The flat piece of rock in which it is found gets constantly covered with earth, and it is considered a pious duty to brush away the dust and clean the print whenever passing the spot. The print is a natural erosion of the rock surface, measuring 20 inches long, and beside it on the stone is a smaller artificial replica, carved by the Arabs, though with what object we could not ascertain. The print is supposed to have been made by a prophetess known as the *Turkomanîyeh* or Turkoman woman, when she mounted her camel at this place on her journey to Mecca.

* In this story there are several points which will interest mythologists. The lovers of two contending families remind us of Romeo and Juliet, whose history under an eastern garb is said to exist also in Western Palestine. The young man slain in the box has striking points of resemblance to Osiris cut in pieces in his coffin, and to many other solar heroes in arks, chests, and coffins. The lovers flying together resemble the pair (Phrixos and Helle) who fly on the ram or bull from the enemy, the tyrant or the monster, by whom they are persecuted—a story spread all over Asia, and found among the Slavs and the Calmucs in Russia.

I am informed that this prophetess is a well-known legendary character, but we have never heard of her before or since, and I was unable to discover her name, though one Arab appeared to believe that it was Rahîl or Rachel.

The earliest possessor of a sacred foot appears to have been Vishnu (the Indian Neptune), of whom Buddha was the final incarnation according to the Brahmins, and of whom, according to some mythologists, the Pope is the Western representative—still distinguished by a sacred foot. Footprints are, however, constantly connected with female saints, Vishnu himself being essentially a feminine deity.

On proceeding southwards to Ain Minyeh, we made the acquaintance of Abu Wundi, chief of the 'Awâzim Arabs, a most jovial elder, who appeared to delight in relating long legends of the vicinity. Two stories of great importance were told to me by him, and I afterwards collected them more precisely from others. The first relates to the famous Aly Ibn Abu Taleb, the "lion of God," the son-in-law of the Prophet, and his true successor according to the Shi'ah or Persian sect of Moslems.

Aly, it appears, travelling westwards, was overcome with thirst as he stood on the edge of the descent to the Ghôr (or on the "top of Peor") at the place called Minyeh. He cried to God, and was instructed to strike the ground with his spear, when a fountain at once welled up, and has since been called 'Ain Minyeh, "the fountain of desire."

It may be remarked, in passing, that this legend is common in Syria, and a variation is found among the Samaritans, who relate that the "fountain of the Arron" sprang up at the point where Shobek king of the Canaanites was transfixed by Nabi the king of the two and a half tribes, when he crossed Jordan to assist Joshua, shut up in the iron walls of the city of Keimûn by the giant enchanters.

Immediately below 'Ain Minyeh is the great basaltic outbreak of Hammet Minyeh, a black mound strewn with boulders, and believed to mark the site of the city of Antarom, one of the most famous of the Arab legendary heroes, who had also a house in the corresponding desert west of the Dead Sea. Antar was a black man (as were also the great heroes Zîr and Abu Zeid), and therefore naturally inhabited a black city on a black hill. The epic of Antar is well known, and is said to fill forty-five volumes. In Egypt it is recited by the class of public reciters called *'Anterîyeh*. It is said, however, by Lane, Deutch, and others acquainted with the subject, that the poetry of Antar is a tedious and lugubrious repetition of complaints on the absence of the beloved heroine.

The legend related by the 'Awâzim Arabs is probably of independent origin. According to them Aly, refreshed by the waters of the "spring of desire," was instructed by God to present himself as a guest to Antar in his black city. He accordingly rode down on his famous horse Maimûn and, arriving at the mound, called for Antar. Fifteen hundred black men came out from the city, but Aly still asked for Antar. "We are all Antars," they answered, and the perplexed Aly was instructed again to ask for

Antar son of Shadîd ("strong"), whose mother was Zebîbeh ("sea foam," evidently a name of mythical value).

On being received as a guest by the real Antar, he entered his house, and found a woman suspended from a beam of the roof to which she was tied by her eyelashes. Long eyelashes are specially admired among the Arabs, and many of the Adwan beauties, for beauties do really still occur among their women, and may be seen driving the donkeys to the spring with unveiled faces, have remarkably long lashes, though, perhaps, not sufficiently thick to support them, if tied up like the legendary lady.

Aly being naturally somewhat astonished, demanded of Antar who this woman was, and why she was thus punished. Antar stated that she was his mother, who hated all guests that came to the house. At the request of Aly, however, she was untied, when she at once began to revile the Imâm through whose kindness she had been released.

"Tie her up again," said Aly, and this was accordingly done. A story which bears some resemblance to this may be found in Spense's "Fairy Queen," and the character of the witch-woman who reviles the hero is not uncommon in mythology.

Three days Aly remained Antar's honoured guest (according to the Koran law), and then mounting his horse he rode westwards to fight against the infidels. "And it was after this," said the old Sheikh, "that he destroyed the City of Brass."

This concluding remark was also very interesting. The legend of the City of Brass was related to us in 1873 by the Abu Nuseir Arabs of Jericho, and will be found in detail in the second volume of "Tent Work in Palestine." It presents in curious confusion the combination of two episodes of Bible history—the destruction of Jericho and the sun standing still on Gibeon—Aly taking the place of Joshua. Mounted on Maimûn, he rode seven times round the walls of the City of Brass, the site of which is shown at thetamarisk tree which stands on the probable position of Gilgal; the brazen walls were overthrown by Aly's breath, and the sun stood still on the Quarantania mountain, "the ridge of the turning back," until the faithful had destroyed their enemies, and were called to prayer by *Belâl* the Prophet's Muedhen.

The relations which the myth thus completed bears to the Biblical episodes—Aly's fountain having a strong family likeness to the spring of Kadesh, and the wonderful spear to Moses' rod or Joshua's spear—may be accounted for in two ways. In 1873 it appeared probable that the legend was a confused reminiscence of the teaching of the mediæval monks, a view supported by the fact that the mediæval "Mountain of the Temptation," is still called "the place of the ascent of Jesus," by the Arabs of the Jordan valley. It seems, however, less probable that the eastern Arabs should have been influenced by Christian teaching as they came into the Belka with the victorious Oma, driving the Christians before them; and although churches and convents of the Byzantine period exist beyond Jordan, there are no

traces in this district of a mediæval colonization, such as gave rise to the numerous monasteries in the Jericho plain.

It seems, therefore, more probable that the legends founded on Old Testament episodes were brought by the Arabs from Arabia, and were there originally imparted by the Jews. It is well known how strong was Jewish influence in Arabia at the time of the rise of Islam, and how much of the Prophet's teaching at one period was founded on Judaism. Even Christian incidents might in the same way be transferred into Arab legends, considering how much of the Koran is occupied by legends based on Gnostic Christianity. The Arabs, aware that the plains of Jericho were the scene of Joshua's miraculous exploits, naturally placed the City of Brass near the Jewish Jericho, and as naturally transferred the credit of such miracles to their great hero Aly. The magic fountain of Minyeh is but the spring of Kadesh transferred from the western to the eastern desert, and Joshua and Moses are thus rolled into one in the person of the great Imâm. There are, however, circumstances in the legend which appear to have another origin, and to belong to Persian mythology, as will be noted later.

The second story related to us at Minyeh is well known throughout Syria, and is of peculiar interest. The Sheikh told us that there was a plot of ground near M'aîn called *Hâna wa Bâna*, and taking its name from the two wives of an ancient Sheikh. Hâna was young, Bâna was old. Hâna consequently carefully pulled out every white hair from her husband's beard, while Bâna assiduously eradicated all the black hairs. The Sheikh, therefore, in the end had no beard at all, one of the greatest disgraces which can befall an Arab elder.

The conduct of these ladies has given rise to a proverb which appears to be well known in the Lebanon—

Bein Hâna Wa Bâna
Râh Lahâna

which means "between Hâna and Bâna our beard has gone," and is equivalent to "falling to the ground between two stools," or to the old idea of the redding strake—the blow received by the man who tries to reconcile those who contend together, and which is worse than any blow which they deal each other.

The reader will at once recognize in Hâna and Bâna the two wives of Æsop's fables, and it is, perhaps, at first sight astonishing to find this familiar story among the Arabs. Every one, however, knows that much which used to be supposed original in the Greek fables has a far older origin, and that the very stories of Æsop are to be found in the Buddhist Jataka tales of previous incarnations—the doings of animals with morals attached. It may be that the story in question is derived from Lokman, the Arab Æsop mentioned in the Koran, but there is also reason to suppose that the story (before its moral was attached) was a sun myth of great antiquity. The sun is very often provided with two wives, who contend for him, as Venus and Persephone for the possession of Adonis, and the sun's hair is one of his best known attributes. In Egypt

and Phœnicia this legend was no less known than in Greece, and probably it was widely spread over Asia. A moral has been tacked to the myth, and as such it comes down to us among the Arabs of the Belka, and among the Maronites of Lebanon.

Another curious legend belongs to the 'Ammân district, where is found an isolated hill called Dhaler Hâmar with a single bush on the top. As the name might mean either "red ridge" or "donkey's back," and as the hill is reddish in colour, I asked the Arabs why it was called so. The immediate answer was, "Oh, that was the donkey's back on which the faithful were saved at the flood (Tufân), it is the only mountain in the world which was not covered by the waters." This legend, if I remember right, was also in existence among the Phœnicians.

Two other stories of minor interest are attached to the hot-springs of the Zerka Maîn and to the spring of 'Ain Fadeily respectively. The first relates how Solomon's slave discovered these springs, as is mentioned by Canon Tristram; the second is to the effect that Belkîs or Zenobia had a paradise at the spring. We were not, however, able to obtain further details on this point.

Another mythical story of great interest is that of the famous hero Zîr, whom we had occasionally heard of west of Jordan. The curious pits in the Ghôr, mentioned by Mr. Selah Merril and other writers, are supposed by the Arabs to have been constructed when Zîr was fighting the infidels, as ambush places where the hero and his companions could wait, mounted on their horses but quite unseen, to rush out on the unwary. There are similar pits, with the same legend of Zîr, at Fasâil west of the river. Near Nazareth is the house and racecourse of Zîr, and here (as also in Wâdy es Sunt) there is a story that the acacia trees which still exist sprang from the tent pegs of Zîr's encampment. Zîr was of the Bein Helâl ("Sons of the Crescent"), and his brother was Jerro ("the whelp"). A long legend concerning this hero was related by our Maronite servants, and appears to be commonly known, though not often heard in its entirety.

Zîr was black like the other heroes of the Arabs, and in his youth he was despised as being foolish and lazy, because when his brother was slain he waited a long time and slept, instead of instantly going to avenge him. He was also an enormous drinker, and insatiably hungry. He swallowed great skins of wine, and remained sleeping in the black tents. His enemies, who seem to have been his brothers or other relations, finally cut him in many pieces and packed his body in a chest, which was borne by the waves to Beirût, and there cast on shore. The fishermen who found it imagined they had discovered a great treasure, and as they quarrelled over it they were brought before Hakmûn, the Jew, who was king of the country. The chest was then opened, and Zîr's body covered with wounds was found inside. He was, however, not dead, but recovered and became a groom in the stable of Hakmûn, who was then at war with the infidels. Left at home while Hakmûn was at war, he was seen by the king's daughter sitting on a wall, brandishing a pole, and spurring the stones as though the wall were a charger, until the blood ran down from his heels. This happened

three times, until finally the princess communicated the stable-boy's strange behaviour to her father, and Hakmûn asked Zîr what it meant. Zîr, who was still supposed to be a half-witted slave, asked to be allowed to go out to battle, and Hakmûn being (as his name seems to indicate) a wise man, told Zîr to choose a horse.

When, however, he began to try the horses, not one was found which could support the hero's weight, until the heroic horse (who in such tales forms a most important feature) was discovered, when the hero went forth to battle as if drunk with wine, and slew on his right hand and on his left all the infidels who came near him.

When the warriors returned to feast at the Palace of Hakmûn in the evening they each began to boast of the numbers they had slain, and asked Zir what spoils he had to show. He led them out to a certain rock, and bade them lift it up—which they were unable to do. The hero then pushing away the rock showed them a hundred bridles of horses whose riders he had slain, and a hundred tongues torn from the riders' mouths. After this he was held in high esteem, and no doubt married the princess.

The interest of this story lies in its well marked mythical character. The younger brother who is despised and supposed foolish, but who eats and drinks more than any other man, and slowly gains strength, is a very well known member of the mythical family. He is supposed to be the sun in the third period (being generally third brother), when nature during winter prepares for the spring ; and the incident of his delaying to revenge his brother recalls that of the Persian Khai Khosru, who bewails his brother Firûd a whole night before avenging him in the morning—belonging to a tale of acknowledged mythical meaning. The story of the chest carried by the waves to Beirût is a most interesting detail, recalling at once the coffin of Osiris carried from Egypt to Byblos—not far from Beyrout, and thence to the palace of the Phœnician king. The sun in Aryan mythology constantly appears during his period of misfortune as a groom, or a cow-herd, and the heroic horse especially in Persian and Vedic myths is one of the great attributes of the solar hero, and his companion in all his adventures.

It is very remarkable that the Arab heroes are always black—a colour not at first sight very appropriate for a sun god. Yet the same peculiarity applies to Khrishna the Indian Apollo, and to the old Chaldean sun god of spring, and it has been supposed to arise from the fact that these myths trace back to the old dark Cushite and Dravidian races, who preceded the Aryans in Eastern Asia.

Among the stories which are related by the romance readers of Egypt, and of which an outline is given by Lane, there are many which seem, like the above legend, to be of mythical origin. Thus the hero who is born with distorted limbs is probably connected with the Egyptian Horus. Abu Zeid, the famous black champion, also called el Barakât, was another of the Beni Hilâl, and his great feast on the round stone in the Jordan

valley has been mentioned in the preceding report. Gundubah, "the locust," born of Rebâb, and having Hâris for his father, is another of the same family. His mother's dream that she brought forth a flame of fire is a myth which occurs in the classics, and the name Hâris is probably only one of the Hebrew names of the sun.

The name Zîr signifies apparently "love," but another origin may be suspected. Osiris is the Aryan Asura, "lord," and ez Zîr is sufficiently near to Osiris to make it possibly a corruption of the Sanskrit, derived either from Egypt or from the East. The legend of Zîr and that of Osiris have so much in common—the former being apparently imported from Cairo by the Syrian romance readers, that we may well suspect the Arab tale to be founded, like the Arab name, on the ancient Egyptian myth of the sun's periodical death.

The question which appeared at first puzzling seems thus to be easily solved, namely, why so many mythical tales are found among the Bedawin and so few among the Fellahin. The influence of Persia on the early Arabs is seen in their art, science, and architecture, not less than in their folk lore. The pre-Islamite Arabs were famous for their delight in poetry and romance, and in Persia they found a very rich mythology long since developed. In my next report I hope to give a few indications of the influence of Persian ideas on the early Arab architecture, concerning which we have made some interesting observations during our recent campaign, meantime a few notes may be added on the Arab tribe marks—which present features pointing to the same conclusion.

The *Wusûm* or tribe marks are found on camels, cows, and sheep, and are placed also on buildings where the Bedawin suppose treasure to be concealed. They have even been mistaken for inscriptions in a new character, and this is mistake very naturally to be made, because many of the signs are identical with Himyaritic characters.

It is curious, however, to remark that these signs are in many cases identical with those used by the Crusading masons in the churches of Palestine, and again with the same masons' marks found in the English and Scotch cathedrals of the 13th century. The same signs are also found on the walls of Sassanian buildings in Persia, in the sixth century, and again they can be traced back to the Indian cast marks, which have a well known symbolic meaning. This is a question which has engaged my attention for ten years, but it is not possible to work it out very much in detail in the present report. A few of the principal coincidences may, however, be noted.

The tribe mark is generally simple in character, and is modified by a *difference* (to use a heraldic term) for each sub-division of the tribe.

Thus the Adwan tribe mark is a single stroke called the *Mutluk*, but the Nimr division use two strokes, and the 'Abbâd three. The Sakhûr have a stroke with a circle at the top called the *Mihmasa*, or "coffee-spoon," and the Faiz division of the tribe have two marks on one side of the top stroke, giving it the appearance of a key. This modified form is called the

Tuweikeh, or "little necklace," and is cut on the tomb of the famous *Fendi el Faiz* in the Jordan valley.

Both the Mutluk and the Mihmasa appear to have been originally Himyaritic letters, the last being the *Koph* which the Himyaritic Slim, 'Ain, Kheth, and Gimel, are also used by other tribes.

A tribe mark occurs on the tombs at 'Ammân and on ruins of Masada, which is of great interest in this connection. It is noticed in the memoir notes, and is the same as the Egyptian crux ansata, the cross with a circle above, approaching very closely to the *Sakhur* tribe mark. This ancient symbol of life is found not only in the hand of almost every Egyptian deity, but also round the neck of Khrishna, or of the Assyrian monarchs, just as it is still worn by Buddhist maidens in Thibet. A very similar mark is found also among the Sherârat Arabs east of Jordan.

Another mark of great interest is the Rijl el Gherâb, or "raven's foot" (crow's foot), a sort of rounded trident, which frequently occurs as a mason's mark in Syrian churches of the 12th century. It is the tribe-mark of the Jibbûr, a branch of the *Sakhûr*, and it closely resembles the Himyaritic Cheth. In India it is called the *Trisul*, and is the symbol of fire, and one of the emblems of the god Siva.

It is still uncertain whether the cross is used by the eastern Arabs as a tribe mark. I was informed that the Jibbûr, who use the crow's foot as above mentioned, also have a cross for one division of their tribe, but this is uncertain. The cross, as previously noticed in another report, is not held in any disfavour by the Arabs, who seem to place it on some of their tombs.

Other marks not yet found as tribe marks serve to connect the mediæval masons' marks with the Persian signs of the same kind. Thus the double triangle, which is a caste mark in India, and is used in Jerusalem as a sign of good luck to avert the evil eye, also occurs in the Crusading masonry. Although tribe and masons' marks may be chiefly useful to distinguish property, it seems pretty clear that they were originally regarded as talismans, which brought good luck to the buildings or animals on which they were placed; and this probably explains why they occur in such great numbers in places held more or less sacred by the Arabs. The *hand* is still cut on the doors of Jewish houses with the same intention. It is worthy of notice that while these marks are thus invariably employed by the Arabs, they do not seem to be ever used by the Fellahin, and that they seem in some cases to come to the Bedawin from Persia and India.*

* It seems worthy of notice that two kinds of sticks or wands, of interesting shape, are carried by the Sheikhs and Elders of the Arabs. One form is a short cane with a spiral head like a ram's horn. The other is a stick with a crutch head, which is often laid beside the tomb or placed on the lintel of the surrounding stone circle. Both these forms of sceptre are commonly represented in Egypt, the former in the hands of Osiris, the latter carried by Horus, Anubis,

This digression may perhaps be of interest to those who are engaged in the study of ancient marks and alphabets, but without drawing any deductions, it is sufficient here to remark that the tribe marks, like the legends, serve to distinguish the Arab from the Fellah, and to belong originally perhaps to an Aryan source. Copies of stones covered with these marks are often brought from Moab, and have sometimes been mistaken for inscriptions; but the absence of any kind of arrangement in lines, not less than the marks themselves, proves that they are the work of the shepherds of various tribes who thus employ their idle moments.

The sudden contrast between the absence of folk-lore in Western Palestine, and the abundance of tales on the East, appears from the above considerations to be very natural. Neither the Arab nor the Fellah can properly be called a Moslem, they have each a cultus founded on much older superstitions, and as distinct as are the origins of their races. Among the modern Canaanites of the villages of the west, the old Canaanite worship still flourishes: the sacred stone, the sacred tree, and the holy cave. Only one story of distinctly mythical origin seems yet to have been collected on this side, namely, that of the faithful dog who took the bones of Neby Duhy to a mountain top; but even in this tale, collected during the course of the survey, the scene is laid on the borderland between the peasants and the Sukr Arabs, and it may, perhaps, have originated among the tribe of Akil Agha, when he spread his tents all over the plain of Esdraelon.

On the east of Jordan, on the other hand, we find myths in existence which bear a close resemblance to the tales of Rustem and other Persian heroes, founded on the Aryan mythology, while from their home in the Nejel the Arabs seem to have brought with them confused versions of Bible episodes attributing the exploits to Imâm Aly and other heroes of the Conquest. A search among the romances of Arab literature would no doubt bring to light many tales purely mythical, for even in the Arabian Nights many of the stories are easily recognized as founded on Persian myths of the adventures of the sun.

C. R. C.

XII.

'Ammân and 'Arak el Emir.

Jerusalem, 16*th January*, 1882.

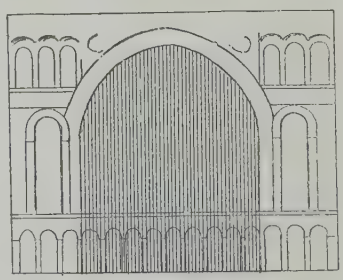
I am at length able to send you detailed reports as to the discoveries of the party at the two important sites above-mentioned. Our camp was pitched at 'Ammân for fifteen days, from the 5th to 20th October, and at 'Arâk el Emîr for the six days following. We took measurements of every building in 'Ammân, and made a special survey of the town to the

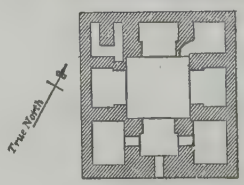
and other male deities. Of the female sceptre with a lotus flower top, we have seen no other specimens.

scale of 8 chains to the inch. The plans, in addition to this survey, cover nine plates, and Lieutenant Mantell obtained fifteen successful photographs in the ruins of the city, some of which are likely to prove very valuable. At 'Arâk el Emîr we made plans of the Palace of Hyrcanus, with sketches of detail; and Lieutenant Mantell took measurements of all the cave chambers and cisterns, and three good photographs, one of which, just sent home, shows the Aramaic inscription in front of the chief cave, and is a specially successful plate.

The most important point amid these various labours is the examination of a small building on the top of the citadel hill at 'Ammân. It has been visited and described by Consul Finn, Colonel Warren, and Canon Tristram, but as none of these explorers were able to remain very long at this site, it has not as yet been fully described. It has generally been supposed to be of Byzantine origin, and has been variously described as a church and a mosque. An inspection of the enclosed plan and details will, however perhaps serve to show that the building is equally unlike either the Byzantine churches, or the Arab mosques of Palestine, and that it has, indeed, an unique character, and is well worth minute study.

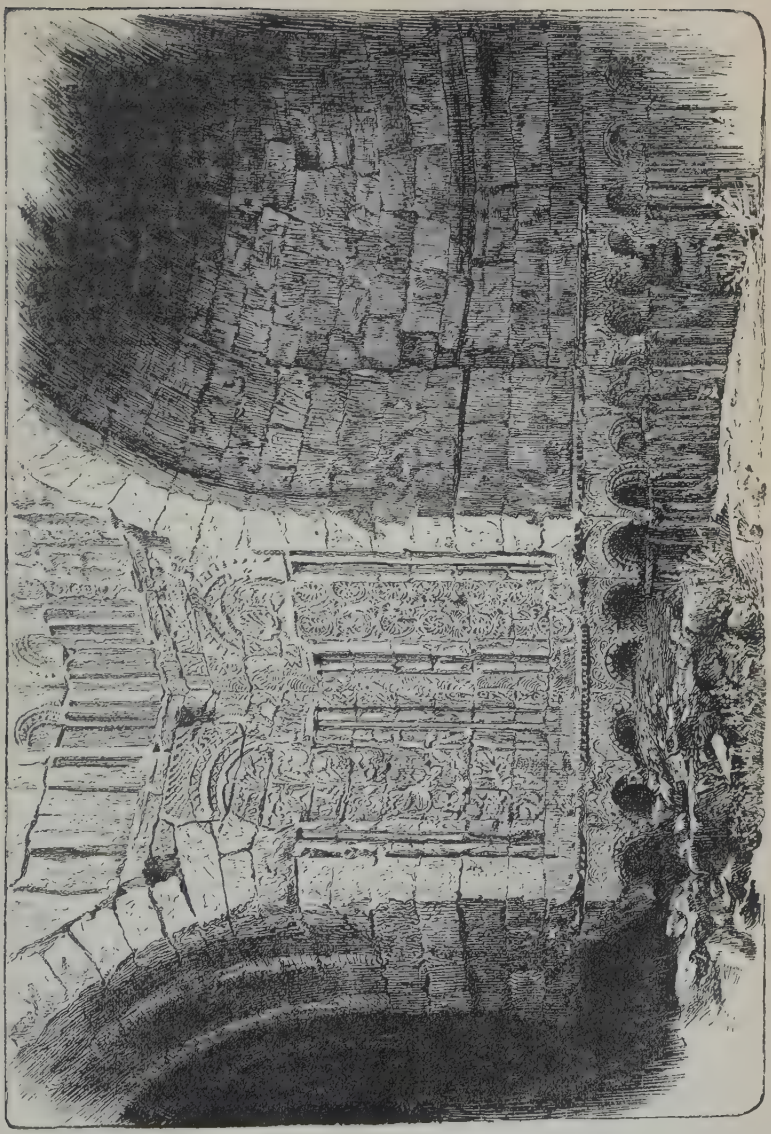
The building stands in the middle of a courtyard of the Temple, and is irregularly built, so that the west side measures 85 feet, the east 81, the south 80. It has a central open court 33 feet square, from which arched recesses open back, each measuring about 18 feet square. In the four corners are small vaulted chambers, and in the north-west angle are remains of a staircase which appears to have led up from the outside to the roof.





It does not seem that the central court was ever roofed over. The entrance to the building is from the south, and seems to be of the same date with the main part of the buildings, although traces of reconstruction may, perhaps, be suspected on the southwall. There was another entrance on the north, now blocked.

The main feature of the building is, however, the elaborately sculptured ornamentation of the inner walls. The accompanying drawings will serve to show the style of this ornamentation, which, as a whole, is quite unlike any sculpture found in Western Palestine. The designs differ on the different walls, and the sculpture does not seem to have been finished, as some of the panels are left plain; and the tracery on the north wall seems to be incomplete. The sculpture is in low relief on stone of fair consistency, taken from the neighbouring limestone quarries.



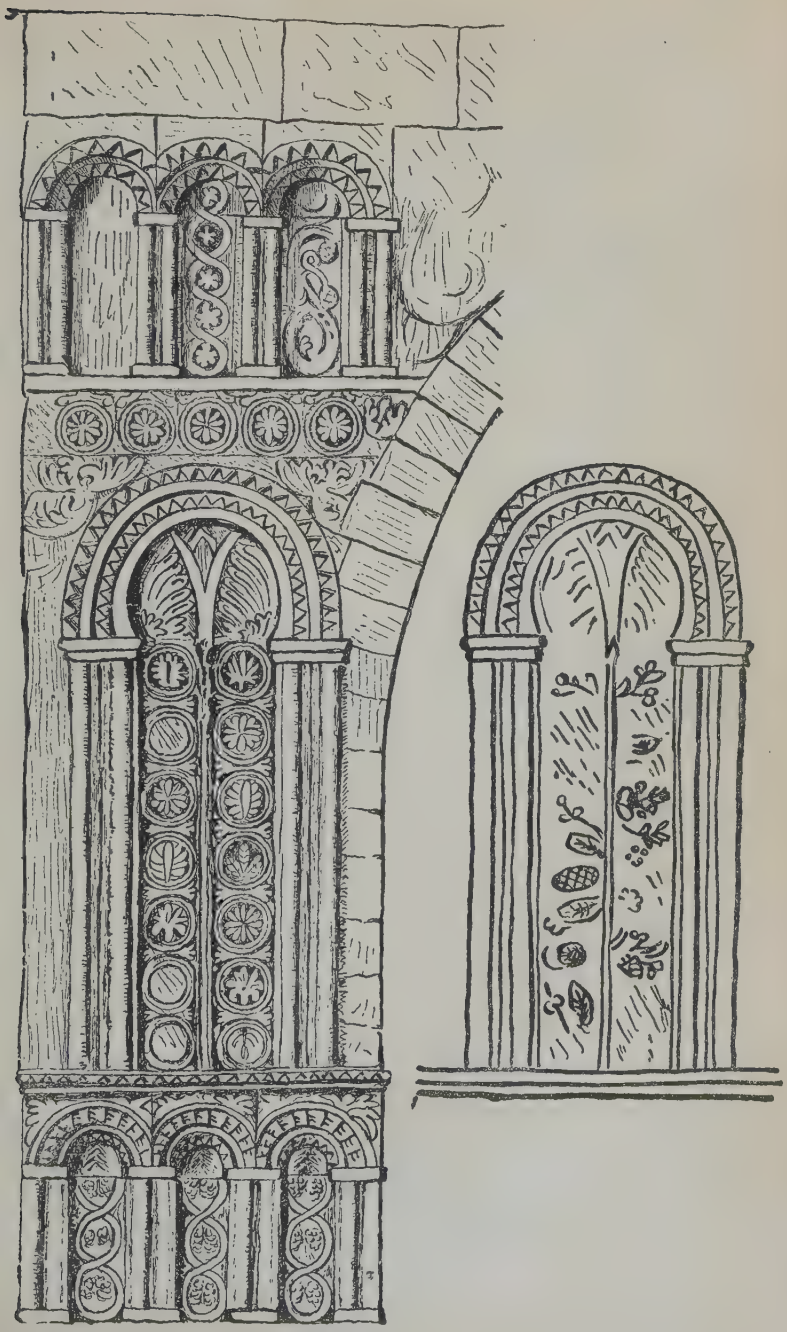
On either side of the bold central arch is a sculptured panel with an arched head, standing on a string course with three smaller arch-headed panels beneath, and three others again above. The bas-reliefs in the larger panels differ in each case, one as shown representing two rows of circles enclosing geometrical designs, while another gives a stiff conventional tree pattern not unlike the sacred conventional tree of Asshur which is found on Assyrian bas-reliefs. There is an entire absence of any figures of birds or animals, and in this respect the sculpture differs from that of the famous Sassanian Palace at Maschita, discovered by Canon Tristram, not far from the present site, although in other respects there is a similarity between the two buildings in detail.

Among the details will be observed a flat dog-tooth moulding, which somewhat resembles the ornament applied by the Crusaders to arches in their early churches of the 12th century,—as, for instance, in the beautiful west window of the Muristân at Jerusalem, of which a photograph was taken by Lieutenant Kitchener, R.E. The vine-bunches which occur in the interior of some of the lower panels are also interesting ; similar conventional vine-patterns occur not only on the later Jewish tombs of the period when Greek art influenced the native sculptors, but also in Byzantine tombs and chapels of the 5th and 6th century in Western Palestine.

The most valuable features are, however, the arches and the pilasters of the panels. It is very curious to note that in this small structure, the round arch, the pointed arch, and the Moorish arch all occur together, the two later forms being in an embryonic condition which architects will probably consider very interesting. The great central arches, which form the face of the tunnel-vaults of the four recessed chambers, appear to have a very slight and almost imperceptible point of which the attached photograph will give a fair idea. The shape is, indeed, almost exactly the same as that of the arches supporting the drum in the Jerusalem dome of the rock. It has long been a subject of debate whether the arches in the latter building were round or pointed. Those in the outer arcade, which are covered with ancient glass mosaic, are round, those in the inner arcade under the drum have a very slight and almost imperceptible point, as can be seen in the photograph taken in 1874 at my request by Lieutenant Kitchener, where three arches are shown directly facing the spectator. These arches are now, however, covered with marble casing, so that it is not quite certain whether the structure beneath may not be a round arch ; but the new example from 'Ammân serves to throw some light on this question.

The feature of the slender coupled columns with very simple capitals is also worthy of special attention, as will be noticed immediately. The Moorish form of the interior of the arches above the larger panels will be noticed on the elevation.

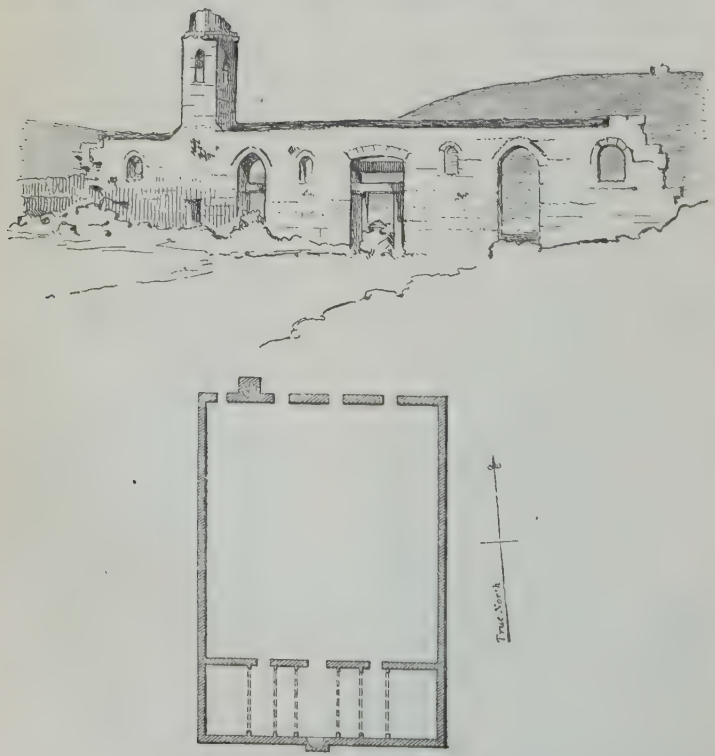
In studying the building under consideration, it is also interesting to compare the ruined mosque at the foot of the hill at 'Ammân, of which a plan is enclosed, with a sketch traced from a damaged photograph. The



sketch shows the north wall of the building, and the minaret. The building measures 183 feet north and south, by 129 feet east and west, and is divided into two parts, the northern being an open court, the southern a rectangular building once covered with a roof supported on arched ribs of ashlar, and having a Mihrab or prayer niche in the south wall. The building is, indeed, a typical mosque properly constructed for Moslem worship, and resembling in plan the fine example of the White Mosque at Ramleh.

The masonry in the two buildings described at 'Ammân is very similar. It is a fairly dressed ashlar of moderate dimensions, none of the stones being drafted. In this respect it differs from many buildings of the later Moslem period (the 14th and 15th centuries), in which a feeble imitation of the bold rustic drafting of the Crusaders is attempted.

The minaret of the 'Ammân mosque is of somewhat stunted proportions. It is nearly perfect, and the winding stair to the Muedhen's balcony is intact. The total height is about 44 feet, and the dome remains, although the outer wall which enclosed it is partially broken. The upper part is octagonal, the balcony supported on stone cantalivers, and probably con-



sisting of a wooden floor with rails, has now disappeared, leaving only the cantalivers. The main part of the tower is 16 feet square outside, lighted by four round headed windows, partly filled up by marble screens. The entrance is from the east, where is a rudely-cut Arab inscription on the lintel of the door—unfortunately giving no date or other information beyond the usual formula, "No God but God; Mohammed, the Messenger of God."

The north wall of the mosque has three gates and four windows. All the arches are round, except the central one, which is a flat arch resembling the ordinary form used in brickwork. It is very interesting to observe that two of the entrances have stone lintels under the arches, as will be seen in the sketch. The left-hand or west door has an arch 7 feet 6 inches in span, the lintel stone being 9 feet long. The central door has a lintel 16 feet long under the flat arch, and a second lintel lower down. The stones appear to have been cut for their present purpose.

This feature approaches to the lintel-stones which occur in Byzantine buildings of 5th and 6th centuries, in various parts of Palestine, having relieving arches above them. In the Byzantine examples, however, so far as I have seen, the arch is never more than a flat arc, whereas in the 'Ammán mosque the stone is placed beneath a bold semicircular arch, and appears to have very little structural use. It resembles, in fact, the wooden beams which run from arch to arch in many Arab mosques, both in Palestine and in Egypt. These occur in the mosque of Amru (642 A.D.), and in the Aksa mosque at Jerusalem, as well as in the outer arcade of the Dome of the Rock. We have, however, never found an example of an Arab mosque in Palestine having what may be called "stone beams," as in the present instance at 'Ammán, and should this latter building prove to be an early example of Arab work (as seems not improbable), the transition between the heavier Byzantine lintel and the wooden beam may, perhaps, be traced in the lintels thus described.

It may be hoped that the preceding description, with the accompanying drawings, will enable architects in England to form an opinion on the date and value of these buildings. Meantime I may, perhaps, venture to add a few observations, which suggest themselves after comparing the 'Ammán structures with other buildings.

In his valuable critique on the Palace of Mashita, Mr. Fergusson compares that building with the Sassanian architecture of Persia, instancing the great buildings of Tak Kesra and Taki Gero; and he also draws attention to the connection between Persian and Byzantine architecture. The elevation of Tak Kesra presents several features of remarkable similarity to the details of the building on the hill at 'Ammán. The great central archway: the walls panelled with arches divided by coupled columns having a simple cap: the use of round, pointed, and stilted arches in one structure, are common to the two buildings, and the inference is natural that the 'Ammán example may prove to be of Sassanian origin—an inference supported by the existence of the Mashita Palace in the same district, since Mr. Fergusson has decided that this latter must be referred to the time of Chosroes II.

There is, however, one great difference remarked between the 'Ammân building and the Mashita palace, namely, that no figures of birds or beasts occur in the former. This suggests that the 'Ammân building may probably be the work of a Moslem people, and thus, perhaps, one of the earliest Arab structures subsequent to the conquest by Omar.

The early Khalifs, including 'Abd el Melek, employed Greek architects in Syria, and Coptic Christians in Egypt, to build their early mosques ; but it is not less certain that the influence of Persian art was strongly felt by the half-civilized Arabs. The historian Ibn Khaldûn, as quoted by Lane, writes thus : "When they ceased to observe the strict precepts of their religion, and the disposition for dominion and luxurious living overcame them, the Arabs employed the Persian nation to serve them, and acquired from them the arts and architecture, and then they made lofty buildings." Mr. Poole has, moreover, pointed out, in commenting on this passage, that probably the Persian influence had affected the Greeks of the Eastern Empire before it reached the Arabs, and that some of the peculiarities of Byzantine art may, perhaps, be best explained by comparison with Sassanian buildings.

If the conclusion be considered correct that the building on the hill at 'Ammân is an early specimen of Moslem work under Sassanian influence, the comparison with the Dome of the Rock at Jerusalem is instructive and interesting.

In addition to the peculiarities of the arches common to the two buildings, it may be noted that at Jerusalem in the outer wall of the Dome of the Rock, we have the same feature of large round-headed panels (pierced in some instances with windows) having above them a second tier of smaller panels, with simple coupled columns between. Probably also some resemblance may be recognized between the details of the ornamentation, as, for instance, the conventional vine-pattern which occurs also (in bronze) on the wooden architrave which spans the round arches of the arcade in the Dome of the Rock.

The Dome of the Rock, which, according to the ancient Cufic inscription in the interior, was built by Moslems in 688 A.D., is a building recognized as presenting features of very Byzantine appearance. The comparison with the Moslem building at 'Ammân may, perhaps, be considered to throw some light on the explanation which may finally be expected of the peculiarities of its architecture.

There are, unfortunately, no traces of any inscription on either the mosque or the upper building at 'Ammân, beyond a rudely carved religious formula above noticed, which seems to have been cut at a late period by an unskilled hand.

It should be noted, finally, that the Moorish arch (a segment of a circle greater than half) not only occurs in the upper building, but seems also to have been used in the arched ribs supporting the mosque roof. The arches have fallen, but the haunch stones in some cases remain, and are corbelled out so as to present a reverse curve, which is rather ornamental than really structural.

It is to be hoped that the notes thus given may assist architects to form a more definite and instructive conclusion as to the date and value of the buildings in question than I am capable of reaching. Leaving the question for the present, I will briefly enumerate the chief observations of interest which we made in other parts of 'Ammân.

The pre historic monuments of the vicinity have been noticed in another report. They include half a dozen cromlechs, one of which, with a table-stone measuring 13 feet by 11 feet, is perhaps the finest example which we have yet discovered. There are also two very large menhirs on the north-east, one 12 feet by 6½ feet, the second 9 feet by 8 feet, and 1½ feet thick, the latter still standing erect.

As regards ancient Hebrew or Ammonite remains, we found as usual little which could be ascribed to that period, whereas Greeks, Romans, Byzantines, Arabs, and Circassians have each in turn left indications of their presence. We were fortunate, however, in discovering a number of ancient tombs, which, so far as I have been able to find out, have not been noticed by former travellers. On the south slope of the hill, west of the ruins, are about fifteen caves very rudely cut in soft rock, a chalk stratum between two layers of flint having been chosen as easy to excavate and presenting an impervious roof and floor. In nearly all these caves we found *kokim* (pigeon-hole loculi) rudely cut, as in the Jewish and Phœnician tombs, and this was the more remarkable as such tombs are extremely rare in that part of Moab at present surveyed.

There are also a great many caves north of the citadel, which may have been either tombs or early Horite habitations. I examined all those which were accessible, but they line the cliffs for more than a mile, sometimes in positions not easily reached. In most cases the chamber within was a mere cave, but one group near the citadel presents kokim tombs like those in the western cemetery. The impression conveyed by the rude character of the tombs is that of a very rude condition of civilization among the Ammonites, as compared with the Jews or the Phœnicians.

As regards the citadel itself, of which we have now a good plan and description, we found nothing to indicate that its buildings are of great antiquity. The masonry is not of great size, and it resembles the early Christian work of Western Palestine in dressing and in proportions. It may, perhaps, be as old as the temple, which appears to belong to the later Roman period. The remains of the peristyle show that this building must have been of large size. Its pillars are 5½ feet in diameter, and the breadth of the peristyle is 52 feet. Only the foundation and bases remain *in situ*, and it is possible that the building was never finished, as no traces of the main body of the temple now exist. There are several fragments of very large epistylia, and these have Greek letters upon them showing that an inscription in two lines once ran along the face of the temple. The letters were copied, but no consecutive reading seems possible. It is remarkable that many of the pillar shafts have the following inscription cut on the flat surfaces.

ΔΩCΘΟC

The letters could, of course, not have been visible when the pillar was standing, and they were perhaps intended as a talisman. In the church at Ascalon I found, in 1875, shafts which seemed to have been taken from an older building, and which had Phœnician letters cut on the flat surfaces in the same manner. These are mentioned in the Memoirs of the Western Survey.

The temple stood in a great court which had an entrance from the east. On the north and north-east are remains of alcoves, with sculptured canopies and scollop shell roofs, resembling the Baalbek courtyard on a smaller scale. It seems probable that the Kal'ah at 'Ammân, with its temple, may be ascribed to the same period as the Baalbek Temple, about the time of Antoninus Pius, in the third century of our era.

The cemetery of the Roman period was principally confined to the southern hill, although a few fine structural tombs occur on the west, north, and north-east. We visited and examined every tomb of which we could find any traces, and have obtained plans and photographs of all that admitted of measurement. The rich settlers seem to have been fond of constructing elaborate family sepulchres, in the form of square towers profusely ornamented with Corinthian pillars, sculptured cornices, and carved domes. We found six fine examples of this kind of tomb in the vicinity, all containing sarcophagi placed on benches round the walls, sometimes in two tiers. Some of the photographs of these buildings have been sent home.

A very effective but economical monument was in other cases formed by placing a rock-cut sarcophagus on a conspicuous spur of rock, sometimes rudely scarped. Specimens of this kind of sepulchre also occur in Western Palestine. In other cases the sarcophagi were placed in caves or rock tombs. Generally they are plain or with simple mouldings, but one with a fragment of Greek inscription was found, and in another case two sarcophagi in one cave had carved lids, one with a vine pattern, the other with two rude lions much defaced.

The theatre, the Odeum and other public buildings of 'Ammân, are already well known. We have now made plans and taken photographs of them all. There is also a large church, and two smaller chapels, a khan apparently of late date, and a bath house with pointed arches. The following inscription is a new discovery. The stone appears to have belonged to the church, but was re-used in a later wall, and a second stone placed over it. One or two letters were seen, and the top stone removed; the mortar which formed the bedding of the top stone was then carefully scraped off, and two squeezes taken of the inscription, which may, perhaps serve to date the church.

ΟΡΙΚΤΩ
ΝΟΝΑ ... ЄΓ
ΔЄΚΑΤΗϹ ΦΙ
ΓΟΡΔΙΑΝΗϹ
ΑΥΡΟΥ ΙΚΤΩ.

The inscription consists only of these five lines, and cannot have contained many more letters than those shown. It is unfortunately damaged in the middle. It appears to belong to the Byzantine period, judging by the shape of the letters.

Another inscription was found by Lieutenant Mantell on a Roman milestone east of 'Ammân. Like the milestone on the Nablus road north of Jerusalem, it appears to record merely the names and titles of Roman emperors.

IMP CAES MARCI ..
AVRELIUS SEY
ANTONINVS I ...
FELIX AVG PI ..
VS MAXIMV .....
.. TANICUSMR ....
.. INTMR .....

Finally a remarkable tank occurs at 'Ammân, which appears not to have been previously visited. The mouth is about 50 paces north of a tower in the north wall of the citadel, and is level with the roof of the tank. A very steep descent, with a few rude steps, leads down 20 or 30 feet, and a sort of shoot at the side appears to have conducted the surface water into the reservoir. The length is 90 feet, the breadth 20 feet, with three large recesses. Close to the door a gallery leads away in the side of the tank, and curves round southwards on to a level not far beneath the surface. This gallery I followed for 40 feet, when it was choked and too small to allow me to go further. I believe it to have been possibly a secret passage in the rock, to a subterranean postern in the citadel tower, allowing entrance to the temple court from an unsuspected direction—the interior of the great reservoir.

South of 'Ammân we visited the ruins of *Sûk* and *Kahf*, already described by Colonel Warren. At the latter site, however, I found a second tomb apparently not seen before, with a finely carved façade having two defaced female busts. Of this fine specimen, which is superior to any of the well-known sculptured tombs near Jerusalem, Lieutenant Mantell made a plan, section, and photograph. The sculptured tomb seen by Colonel Warren appears to be of Christian origin, having a cross in the cornice over the entrance. The details of the capitals have a Byzantine character.

On our way to 'Arâk el Emir we visited the curious site called *ed Deir*, which was also seen by one of Colonel Warren's party. It is a rock-cut house in three storeys, with windows cut in imitation of masonry. We made a plan of this excavation, which is perched in a cliff looking out above the oak trees which fill the valley. The walls are full of niches, which seem to have been intended either for urns or skulls. There are about 740 of these niches in the ground storey, and probably an equal number in each of the others ; but as the floors have given way I was only

able, by scrambling up a pole, to visit the second story, and could not see the interior of the third. I have had occasion to describe similar niches in Western Palestine, notably at Masada. They are larger than those usually found in Columbaria, and the explanation I then offered, that they were intended for the skulls of the deceased monks, met with acceptance. At Masada they occur in connection with an early Christian chapel, and a cave with a Greek Christian inscription. The names of the rock-house under consideration (*ed Deir*, "the monastery") seems also to indicate a Christian origin for these curious structures. At 'Arâk el Emîr there is a detached rock with rows of niches in one side, but the niches in this latter cave are too small to have contained anything but urns, or perhaps, more probably, lamps. They occur on the *east* side, which would be that most sheltered from the summer winds. It seems not improbable that the face of the cliff might thus have been illuminated by the light of some 26 lamps at the time when Hyrcanus used to feast in its rocky chambers.

The ruins at 'Arâk el Emîr are too well known to need description in a report like the present. The palace built by the priest Hyrcanus is described by Josephus as decorated with sculptured lions, and there seems no good reason for supposing that the ruined building still existing is of older origin than that indicated by the Jewish historian. The peculiar character of the capitals and fragments of cornice is just that mongrel style which, as shown by the rock-tombs near Jerusalem or in the synagogues of Galilee (dating from the second century, A.D.), resulted from the imitation by Jewish architects of Grecian classic art. We took careful measurements and sketches of detail, and it was interesting to note that the lions, four of which remain *in situ* as a frieze, were carved after the great stones had been placed in their present position, as is shown by the projections on the same plane of relief which occur above the animals' bodies.

There is a curious raised causeway leading from the palace of Hyrcanus in the direction of the great cliff, with its double tier of caverns, which is situated about half a mile to the north east. Along this mound occur pairs of *cippi*, about 4 feet high and 2 feet broad, partly sunk in the ground. Each *cippus* is pierced with a hole 7 inches in diameter, in most cases countersunk for about half the thickness of the stone (averaging $1\frac{1}{2}$ feet near the top) as if for a bar or pole passed through or butting inside the stone. The width between the pairs of *cippi* is 3 feet, and this is so small that it seems impossible to accept the general theory that these stones mark the sides of a Viâ Sacra or other roadway leading from the festal chambers in the cliff to the palace.

It is noticeable that there is a gradual descent to the palace from the cliff, the foot of the latter, by aneroid measurement, being 170 feet above the platform on which the palace stands. There are 27 pairs of stones along this line, and it seems pretty certain that many others are buried or lost.

The size of the blocks in the palace wall is enormous, the stones being twice the dimensions of those in the Temple walls at Jerusalem. One

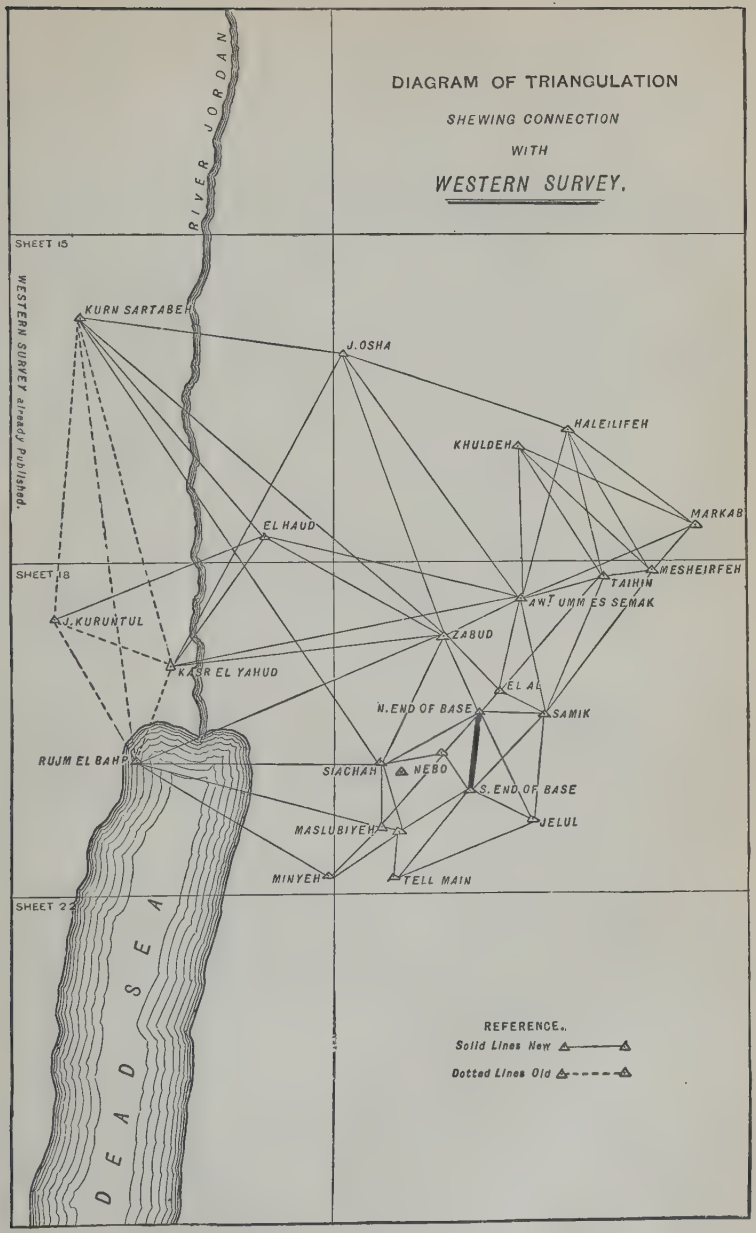


DIAGRAM OF TRIANGULATION
SHEWING CONNECTION
WITH
WESTERN SURVEY.
RIVER JORDAN
SHEET 15
WESTERN SURVEY already Published.
KURN SARTABEH
J. OSHA
HALEILIFEH
KHULDEH
MARKAB
EL HAUD
MESHEIRFEH
TAIHIN
AWT UMM ES SEMAK
SHEET 18
J. KURUNTUL
ZABUD
KASR EL YAHUD
EL AL
N. END OF BASE
SAMIK
RUJM EL BAHR
SIACHAH
NEBO
S. END OF BASE
JELUL
MASLUBIYEH
MINYEH
TELL MAIN
SHEET 22
DEAD SEA
REFERENCE.
Solid Lines New
Dotted Lines Old

was measured as 17 feet long and 8 feet high. A second 20 feet long and 10 feet high, and there are many others as large. It is, however, a peculiar feature of the building that the thickness of the stones is comparatively very small, averaging only about $2\frac{1}{2}$ feet.

This consideration led me to suppose that the pierced *cippi* might have belonged to a sort of wooden staging or "ways" intended for moving the great stones. Poles placed in the holes might have formed sleepers on which this staging was constructed, and each stone would thus have been slid down hill to the palace with great ease. It is noticeable that one great stone still lies on the hill close to the causeway, as if abandoned half-way between the quarry and the palace. It should, however, be noted that the existing pairs of *cippi* are never less than 20 paces from one another, which would seem too great a distance to be spanned by such poles as would be attainable in Palestine. Possibly the better explanation would be that they were used for fixing ropes with pulleys, which served to drag the stone along. It is, however, clear that the stones might, by either means, have been easily moved, and that they were narrow enough to pass between the *cippi*. Considering, therefore, how little is yet known of the methods employed in moving the great blocks used by the Roman and late Jewish builders, it seems very interesting to find this stone scaffolding, if the expression may be permitted, still remaining *in situ* at Tyrus.

The curious Aramaic inscription on the cliff is so well shown in Lieutenant Mantell's photograph that it does not seem necessary to send a further representation. It remains, however, to be read, as the interpretations hitherto given appear to be all equally unsatisfactory so far as I have been able to learn.

It should be noticed that the name Tyrus given to this spot by Josephus is probably the Aramaic Tsur or Tsir. There is a ruin called Sûr not far west of 'Arâk el Emir, and the name of the great valley beneath the cliff is Wâdy Sîr: further up the valley are the ruins and spring of Sîreh, and on the edge of the plateau above is the ruined town of Sar.

The three last reports have thus given a *résumé* of the most interesting results of the recent campaign in Moab. The notes and plans which we may hope to form some day into a memoir are more numerous and important than those collected in any equal area west of the river; and the Survey of the East as a whole ought, in my opinion, to form a work more generally interesting, and scarcely less important from a Biblical point of view, than the Western Survey.

C. R. C.

AMMAN.

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The building at Ammân has also been visited by Canon Tristram and Colonel Warren, the latter of whom was enabled to take a good photograph of it, and to take a general plan of the remains of the city, which plan was published in the *Quarterly Statement*, 1872, p. 66, accompanied by a short description by the Rev. A. E. Northey.

Canon Tristram has also described the building in "The Land of Israel," p. 588. He states that "the interior architecture of the church, if not in the purest taste, is marvellously elaborate. It is faced with 120 small round-topped niches, each shallow, and the panels filled with carvings of endless variety. No two are alike, either in the sculpture of the arch-heads or of the panels. Flowers, leaves, and fruits are the predominant designs, forming quite a pattern-book for Gothic decoration. The upper story is filled with niches of similar plan, but much larger, extending to the roof. Eight panels of leaves and pines, all in different patterns, occupy the faces towards the centre, and many others the limbs of the cross. The whole reminded us somewhat of the ancient church at Athens, though that is much poorer and on a smaller scale. The state of preservation of this building is truly marvellous."

But the curious architectural details were not, unfortunately, drawn by him.

Captain Conder has now supplied these, together with a photograph taken by the second officer in charge, Lieutenant Mantell. The plan externally of the building is, roughly speaking, quadrangular, 85 feet by 80 feet. But internally, it is that of a Greek cross, the centre part being occupied by an open court, 33 feet square, in each side of which is a recess, 18 feet wide, and 18 feet deep, arched over, but open to the court in front.

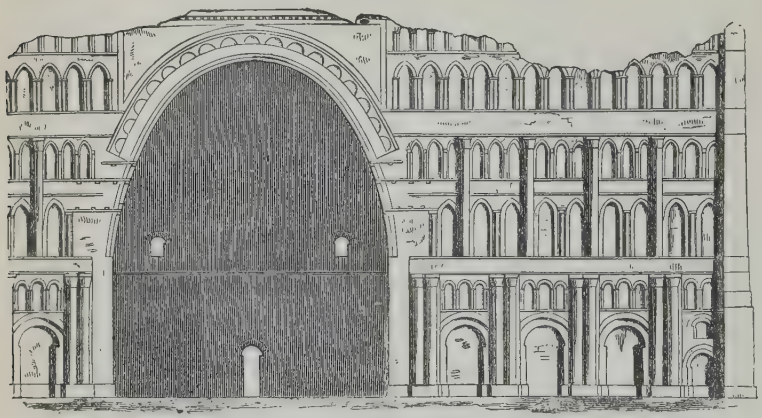
The arches appear to be pointed.

Three of the spaces completing the square are occupied by vaulted chambers, and in the fourth (north-west angle) are the remains of a staircase.

The large recesses are 33 feet high to the apex. There are no remains of dome or other roof over the crux. The building has been variously described as having been a church or a mosque. The plan bears some resemblance to that of a Greek church, but differs from it in some essential particulars, and more resembles that of such buildings as the Mosque of Hassan at Cairo, or the Mosque at Broussa, whose date is known to be of the 14th century, or the new Mosque at Algiers, built in the 16th century, both of which were designed by Christian architects for Mohammedan worship.

There are special features in the building at Ammân which render it very interesting.

In the first place the great arches over the recesses, and the wall spaces on each side, are designed in almost exactly the same way as those of the Tak Kesra at Ctesiphon, as shown in Mr. Fergusson's "History" (here reproduced by Mr. Murray's permission) and to a large scale in Flandin and Coste's "Persia."



This is assigned by him to the Sassanian period, 550, and the Ammân building, though very much smaller, is so like to it, that no one, whether architect or not, can fail to be struck by the resemblance. But the details at Ammân much exceed those of Ctesiphon in richness.

To quote Captain Conder's words, "The main feature is the elaborately sculptured ornamentation of the inner walls, the style of which, as a whole, is quite unlike any sculpture found in Western Palestine."

The ornament to which he refers consists, mainly, of panelling, as at Ctesiphon. But instead of being plain, as there, the semi-circular arches are much enriched, and the larger ones enclose others of distinctly a horse-shoe form, the panel having a centre mullion.

The narrow lights thus formed are filled in with roundlets, each having a rose or other ornament in the centre. Captain Conder notices that "there is an entire absence of any figures of animals." As to "the vine branches which occur in the interior of some of the panels, similar conventional vine patterns occur not only in the later Jewish tombs when Greek art influenced the native sculptors, but also in Byzantine tombs and chapels of the 5th and 6th centuries in Western Palestine. Among the details are a flat tooth moulding, which somewhat resembles the ornament applied by the Crusaders to arches in their early churches of the 12th century,—as in the beautiful west end of the Muristan, Jerusalem."

The architectural peculiarities to be noted from the forgoing statements are the general design—the horseshoe and (probably) pointed arches—the ornamental filling in to the narrow lights—and the tooth ornament.

The design appears clearly to have been derived from Sassanian sources.

The origin of the horseshoe arch is not so clear, but we have several well dated examples of it in the 6th and 7th centuries, as at Dana on the Euphrates, and at Edessa, as described in Pullan's "Byzantine Architecture."

Another well dated example has been kindly pointed out to me by Mr. Fergusson, viz., a Syrian MS., finished in 586, a copy of which is given in the spendid work of Garucci, and which shows horseshoe arches within semi-circular ones.

The filling in to the panels at Ammân is very similar to that of the windows in many of the small Greek churches, *e.g.*, the cathedral at Athens, the date of which is supposed by Couchaud (Églises Byzantins) to be the 6th century, whilst Mr. Fergusson considers the date to be of the 11th, 12th, and 13th centuries.

From careful examination of these and other old Greek churches on the spot many years since, and again, quite recently, I am in accordance with Mr. Fergusson, to whom I have given the reasons for my opinion.

The part of the Muristan at Jerusalem to which Captain Conder refers, which I know well, and of which we have a fine photograph, taken by Lieutenant Kitchener, is of the 12th century.

The result as to the Ammân building would appear thus to be that it was designed at a late period in the traditionary style of the Sassanians, with the horseshoe arches of the East (whatever their origin), the Byzantine fillings in of the windows, and peculiar ornament used by the Western nations in their 12th century work. As singular a medley as is, I believe, to be found anywhere.

Near to the above are the ruins of a mosque, the greater part of whose walls and minaret remain, and of which we have photographs taken by Colonel Warren and by Lieutenant Mantell.

Captain Conder describes it thus—"It is a typical mosque resembling in plan the white mosque at Ramleh, and measuring 183 by 129 feet, built of finely dressed stonework. The minaret is nearly perfect, and the staircase intact. Two of the entrances have stone lintels under the arches. One arch is 7 feet 6 inches span, the lintel stone 9 feet long. Another has two lintels, each 16 feet long. The stones appear to have been cut for their present purpose, and to have little structural use. There are no traces of any inscriptions beyond a rudely carved Moslem religious formula over the door, which appears to have been cut at a late period by an unskilful hand."

The architectural interest attached to this is that these peculiar lintels were used in the early centuries A.D., in and about the Hauran, as may be seen in Count Vogüé's book on Central Syria, *e.g.*, at Bozra.

To show still further what architectural interest attaches to these countries east and south of the Dead Sea, and east of the Jordan, I may mention that Professor Palmer describes in his report (to the Palestine Exploration Committee) of his journey through the rarely visited country through Petra to Beersheba, the finding of grand remains of the ruined city of Sebaita, supposed to be the Zephath of the Old Testament.

The ruins are 500 yards long, and 300 wide—the streets still to be traced ; and there are large remains of three churches, many of the walls being 20 to 25 feet high. "The houses are built of stone, and the want of timber beams has been most skilfully supplied, all the lower stories being built with arches about 3 feet apart, and 2 feet wide, long thick beams of stone being placed across them."

No one who has visited the Lebanon district, or read Count Vogüé's book on Central Syria, can fail to perceive that the style of building which characterizes these northern districts, was the style used also in Moab and south of the Dead Sea, and that there are several chapters yet to be written on the art history of the past when these wild districts have been carefully explored.

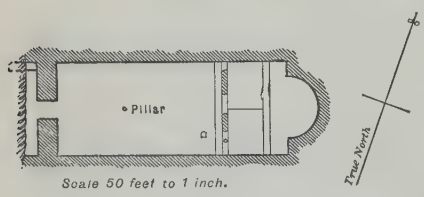
T. Hayter Lewis.

JERUSALEM.

Newly Discovered Church.

I. 18*th January*, 1881.

The church of which I sent a plan by last mail has been further excavated, and an interesting piece of painting brought to light. A slab of fine limestone 20 inches by 4 feet 5 nches has on it a simple cornice, once apparently gilt, and beneath this are the figures of the twelve Apostles, each surrounded by a sort of canopy ; they stand six each side of a central figure of the throned Christ. The figures are rather stiffly drawn, and have long robe, the feet (reminding one of the early Italian pictures of Giotto) are never visible—so far as I have as yet been able to ascertain. The slab has on the top surface the diagonal dressing used by the Crusaders.



Only a few courses of the walls of the church are standing, they have been plastered inside, and the plaster was painted. I found a mason's mark on one stone, and others have the diagonal dressing. North of the church are found vaults with pointed rubble arches. The whole is evidently of the crusading period. We are are going to-day to take a tracing of the painted tablet, which will be sent home as soon as possible. The position of the church precludes the idea that it is that of St. Stephen, built in the 5th century. It seems to have been rather a chapel adjoining the Asnerie or Templars' Stable, which I was able to identify in 1873 with certain ruins close to the newly found church on the south.

C. R. C.

II.

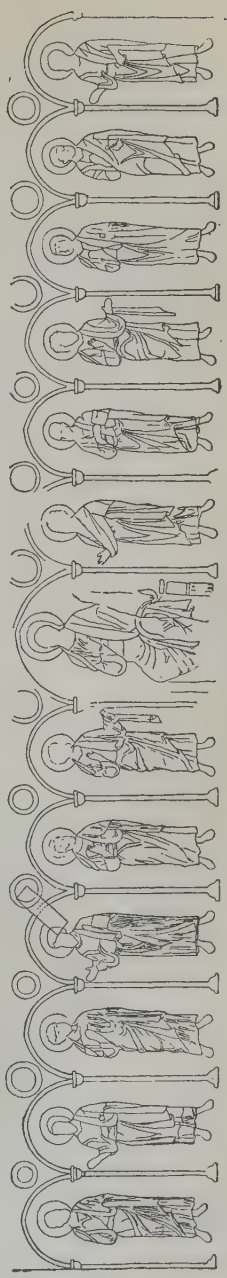
JERUSALEM, 15*th February*, 1882.

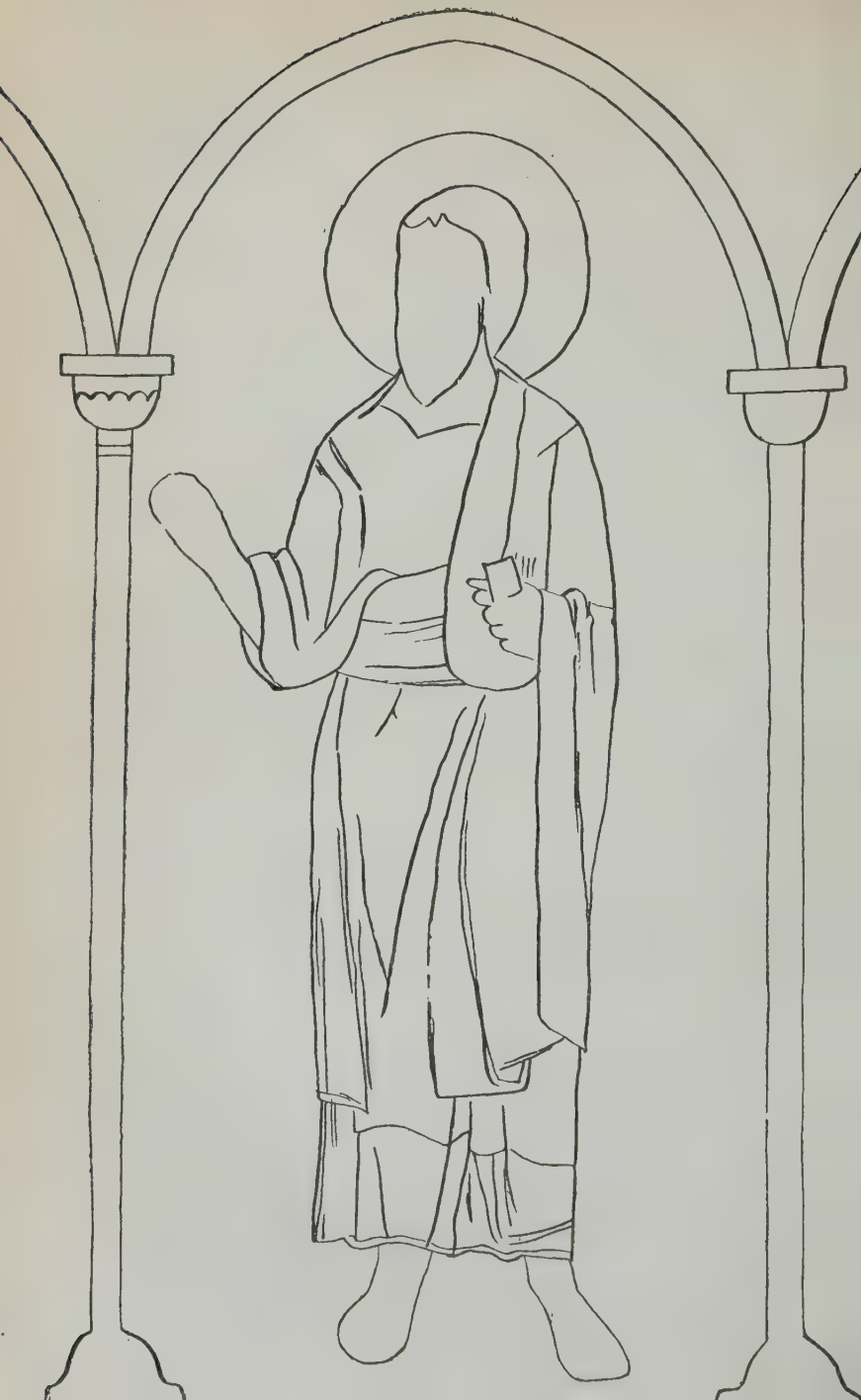
THE excavations at the newly discovered church outside the Damascus Gate are still in progress, but have been greatly impeded by the recent rain and falls of snow. The work has been done principally at the ends of the church, that is to say, towards the east and towards the west of the building. The outer surface of the east wall of the church—that in which the apse is built—has been laid bare. Parallel to this has been discovered one wall of a second building, perhaps a convent in connection with the church. The passage left between the two buildings is only 3 ft. 4 in. in breadth, and the stones of the convent have a remarkably clean and new appearance, as if the wall had only been recently constructed. This is no doubt due to the protection which it received from the church immediately in front of it. Moreover, the passage between the two may very possibly have been covered in, and an additional protection thus afforded to the surface of the stone.

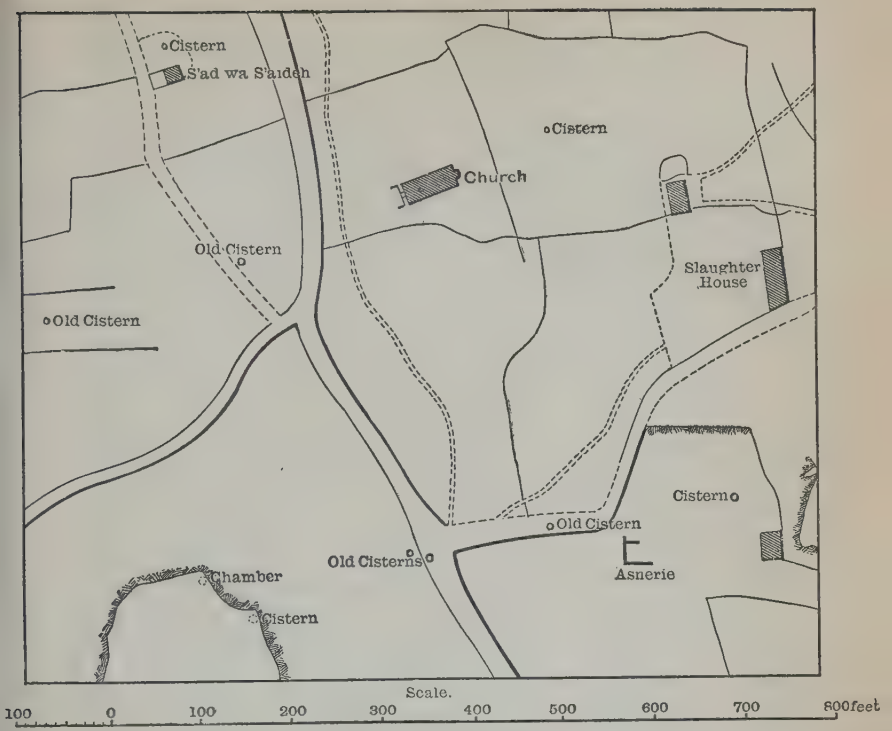
The north wall of the convent has also been laid bare for a distance of some 30 feet, but the eastern extremity has not yet been reached. It is built of larger blocks of stone and more solidly, being no doubt an outer wall, and appears to have been exposed to the weather before having been covered in by the earth which has just been removed.

The workmen say that they have discovered a cistern in the passage between the church and the convent. It may, perhaps, exist, but yesterday while examining the place by ourselves we were unable to find the mouth.

A new door has also been discovered at the south-east corner of the church. It opens out towards the east, and is situated between the apse and the south wall. There is a fresco inside under the door-







step, but to see this and the door properly further excavation is necessary.

At the west end of the church the ground outside the main entrance proves to have been paved with flag stones to a distance of eight or nine feet from the wall. To the left on entering the paving extends to the entrance to a tomb mentioned in Captain Conder's previous report, and at this point an inscription has recently been discovered.

Further again to the west, at a distance of 31 feet from the church, a wall has been found running north and south. The extremities of this wall have not yet been laid bare, and its connection with the main building is not clear.

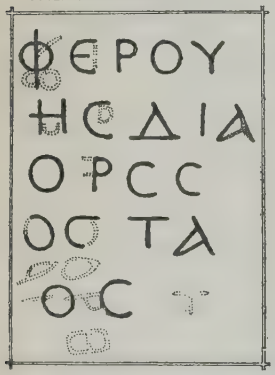
The point which has excited most interest is the inscription referred to above. It is cut in one of the flag stones (measuring 23 inches by 16 inches) over the tomb. The letters are of the well-known late Greek form, and in some instances are well cut. The surface of the stone is, however, much worn, so that in places it is very difficult to distinguish artificial and time-worn grooves. I send a copy of the inscription traced from a squeeze, and have shown as far as possible the distinction between marks certainly intentional and others which are doubtful.

As yet no one has been able to suggest a translation. In the first line the word ΦЄΡΟΥ is very distinct. Dr. Chaplin thinks that the marks shown in outline adjoining the letter Φ may be a contraction for XPICTOΦ, making the whole word XPICTOΦЄΡΟΥ or Christopher. In the second line the only doubtful letter is the Δ which has been read Λ. However, it seems to me that a horizontal stroke is visible, although not nearly so plain as the rest of the letter. As regards the third and fourth line there is little difference of opinion, but below the word OCTA are a number of marks in which it is almost impossible to distinguish those which are time-worn from those which are artificial.

It has been suggested that we have only recovered a part of the inscription, the stone on which it is cut having formed portion of a block employed previously for some other purpose, and that we have lost the right half or the left half of each line. An examination on the spot shows however, that this is improbable. The flag-stone is *in situ*, above a tomb—a very natural position for a tomb-stone. It is close to the door of the church, and the workmen would not be likely to disfigure the floor in such a place with a previously used stone, when a new one might be so easily obtained. Moreover, the tracing of the squeeze shows that the present inscription could nowhere be cut through at right angles to the lines without dividing some of the letters. If the inscription had been originally longer it is unlikely that it could have been cut in two without thus dividing the letters, but along each side of the stone as it now stands there is no trace of any such prolongation of the lines. In all probability we have before us the whole inscription, and it only remains to decipher the contractions which it no doubt contains.

JERUSALEM.

Inscription at newly discovered church outside the Damascus Gate



The enterprising owner of the church intends to continue his excavations. Unfortunately the ground outside the south wall does not belong to him, otherwise he might have found chambers and tombs similar to those on the north. He intends, however, to work in an east and west direction, and to uncover the walls as far as he is allowed to do so by his neighbours.

A. M. Mantell, *Lieut., R.E.*

NOTE ON PRE-HISTORIC REMAINS IN WESTERN PALESTINE.

The reason which I have suggested in a former report for the absence of dolmens in Judæa, was the reiterated injunctions to the Jews to overthrow the pagan altars and pillars. Since the discovery of so many splendid specimens, most of which have not been previously seen (especially at Heshbon), we have been anxious to re-examine Western Palestine with a view to ascertain whether some hidden examples might not exist of dolmens or menhirs. Visits to likely spots have, however, as yet produced no results.

My attention has now been called to a site immediately north of Kastal and of the Jaffa-Jerusalem road, where a small monument has been found much resembling a dolmen. It is a flat stone measuring 6 feet by 3 feet, supported on one side by a block 3 feet by 6 feet and 3 feet high, and on the other by small stones. On the other side of the hill are two smaller monuments with stones 3 feet long. The site is one not unlike those places where dolmens are found beyond Jordan, namely, a hill looking down on an open valley with springs ('Ain Dilbeh); and there are races of a large enclosure on the flat hill top. I am not, however, able to satisfy myself that the stones in question have been really piled up as dolmens: their upper surfaces are rough, and there are no channels or cup-shaped hollows; they are, in fact, of the same tantalising character as some of the similar structures which Mr. Drake and I used to examine, without ever feeling satisfied that they were more than accidental on natural productions.

In addition, however, to the "stone of blood" and other interesting dolmens found by Lieutenant Kitchener in Galilee, there are one or two others mentioned in the Memoirs. The monument occurring east of the plain of Esdraelon (of Deir Ghazâleh, Sheet viii, Sect. B, "Memoirs of West Palestine Survey") appears to me clearly to be cognate to the Minyeh enclosures (see Report X). It has a dolmen altar, and traces of an oval with a central cippus—although not of great size. The dolmen itself is fully equal to the average size of those beyond Jordan.

In surveying the site of Gezer I also found a monument which seems probably to be a dolmen. It has two Hebrew letters (or what appear to be such) cut on the top stone. I obtained a sketch and measurements in 1875, and the structure is briefly described in the Memoirs.

The cup-shaped hollows in flat rocks, which are found beyond Jordan close to dolmens, are also often found in Palestine. They may, perhaps, mark the sites of former dolmen altars which have been purposely destroyed by the Jews. Three such hollows, each about six inches in diameter, were noticed by Lieutenant Mantell on the hill at Kastal about 250 yards north of the doubtful cromlech.

C. R. C.

THE SILOAM TUNNEL.

JERUSALEM, 1*st December*, 1881.

THE details recorded in the Siloam inscription concerning the great conduit, seemed to render it expedient to revisit the channel, in order to search for the point of junction between the two working parties, as well as to ascertain whether any other inscribed tablets might exist in other parts of the tunnel, or whether any marks connected with original measurements might remain.

Lieutenant Mantell, Mr. Armstrong, and I therefore visited the tunnel on 10th November, and spent nearly five hours in it, crawling from one end to the other, and measuring carefully, with a chain and a prismatic compass, the whole length between the Pool of Siloam and the upper spring (en Rogel, Gihon in the Valley, Bethesda, 'Ain Umm ed Deraj, or the Virgin's Fountain, as it is variously called).

We found less difficulty than Captain Warren experienced, because the level of the water has been lowered, and the overflow of the upper spring does not occur often in autumn. We were nevertheless very anxious while employed in the central section of the tunnel, where the height is only about 19 inches for some 20 yards, the breadth being only about 2 feet: for if the waters were to rise here (when the overflow occurs) to a height of little over a foot, it would be almost impossible to escape drowning. We were unable to ascertain when the water was expected to rise, or the height to which it attains; but fortunately no overflow took place during the five hours which we spent in the tunnel, and we suffered only from the discomforts of mud and leeches and wet clothing, with the fatigue due to crawling so long in a cramped position, occasionally over stones or sharp fragments of broken pottery.

The measurement which we obtained with a chain (afterwards corrected by the standard) gives a total length of 1,706·8 feet between the Siloam end of the tunnel and the place where it enters the cross passage to the Virgin's pool, thus agreeing within 2 feet with Colonel Warren's total of 1,708 feet, and proving that his conjecture as to Robinson's measurement must be correct, and that the latter authority includes in his total of 1,758 feet that portion of the cross passage which leads from the Siloam tunnel to the back of the Virgin's pool, and which measures 50·8 feet by the chain.

The accompanying plan will be found to agree with that of Colonel Warren. The section is made from measurement of the height of the channel in different places, taken by us at frequent intervals where a marked alteration occurs. The surface is shown in accordance with the intersections along the canal of the contours shown on the Ordnance Survey; and the supposed rock surface agrees with Colonel Warren's "Rock Contours on Ophel," checked in one place by an actual measurement of the rock surface, which we have now taken in the vertical shaft leading up from the roof of the tunnel.

We were, however, not completely satisfied with the results of our first visit, and accordingly, on the 22nd November, Lieutenant Mantell and I revisited the tunnel with a view of ascertaining the point of junction between the two working parties, and of searching for measurement marks on the walls.

We entered from the northern end, and had just commenced operations, when a shout from our servant warned us that the waters were rising.

When we first entered there was not much more than a foot depth of water in the pool, but the rush of water was now very rapid, and the depth increased just after we had reached the foot of the steps which lead down to the pool, to 4 feet 7 inches. The sound of the current pouring down the tunnel was distinct, and the depth of water in the channel, as we found afterwards, was somewhat over 9 inches, so that before the level had been lowered at the Siloam end the passage of the tunnel must always have been a very dangerous undertaking ; and, indeed, might still prove so to an explorer caught by the overflow in the lowest part of the passage near the centre.

On our second visit we remained four hours in the tunnel, and inspected both walls very carefully, from the northern entrance to the place where we now suppose the junction of the two working parties to have occurred. I think we may state with confidence, that there is no tablet similar to that now famous, to be found in any other part of the tunnel, and that there is no other inscription. There is, indeed, no place fitted like that where the existing tablet has been found, because the tunnel is quite dark except at the mouth, and is for the greater part of its length so low that it would be extremely difficult, and often impossible, to carve an inscription.

As regards the existing tablet, I may remark that I have examined it again very closely, and feel convinced that the inscription has not been in any way damaged by the application of hydrochloric acid to remove the lime deposit which had filled in the letters. I have made the same remark in the previous *Quarterly Statement* (p. 278), but Professor Sayce appears (p. 282) to adopt the opinion of Mr. Pilter, that the acid has damaged the inscription, and he remarks that my report "makes the fact quite plain." We have, however, copies by Dr. Guthe, taken both before and after the cleaning of the inscription, which served to show that no bad effect resulted from the repeated washings ; and the rock surface is still quite firm and hard, showing no signs of rottenness or chipping. I cannot but think that the letters which Professor Sayce put down, and which cannot now be discovered on any of the squeezes or casts, were not actually existent in the rock, but were merely marks formed by the lime deposit, and thus removed by the acid. Having seen the tablet before the acid was applied, I can add my testimony to that of others as to the entirely different aspect which the inscription presented before and after cleaning.

Before cleaning it resembled a rude scrawl of uncertain shapes, while it is now seen to have been carved with great care, in regular lines, and with constant forms for every letter. The copy published in the *Quarterly*

Statement for April, p. 70, contrasted with that given in October, p. 286, gives in fact a very fair idea of the difference which was made by cleaning the tablet.

The cast which has now reached England is fortunately so good that but little room for dispute can be left. It appears that the text must originally have consisted of about 190 letters, of which 171 are recoverable. This number exceeds that which was first given in Professor Sayce's copy, the total of which was 169 letters. It seems, therefore, clear that no letters have been lost in the process of cleaning.

The cast and squeeze will be found to agree with Professor Sayce's copy in 151 out of 169 letters. It is therefore clear that, practically, Professor Sayce was able, in spite of the great difficulties which he encountered, to transcribe correctly the great bulk of the inscription, and thus was the first to give the reading which in the main has been accepted. In his latest copy he has corrected 13 letters out of 18, in which he differed from the squeeze and the cast, and has added one of the two missing letters. The points of dispute, so far as the letters are concerned, are thus reduced to five letters which are doubtful, and two letters which appear on the cast but were not sent home on the squeeze, or noticed in the accompanying report.

I have also compared the cast and my own squeeze with Dr. Guthe's copy, which is the best which has been made, with exception of the cast. Dr. Guthe's copy agrees with ours in every respect. He has, however, shown six more letters than we were able to recover, and all six are correct according to the cast. Indeed, Dr. Guthe's copy appears to be perfect, with exception of the omission of two letters in the first line, which will be discovered on the cast.

The important details which will be elucidated by the cast are as follows :—In the first line Professor Sayce and Professor Socin read הנקבה בעוד. It seems, however, from the cast, that the second word is perhaps בעועז. In the fourth line Professor Sayce reads אל המים, but Professor Socin על המים. It will be seen from the cast that Professor Socin is right. There are, of course many other minor points on which the cast throws much light, confirming the squeeze in a very satisfactory manner. In the fifth line there is no doubt room for the disputed letters in the reading במאתים ואלף, but I have not been able to find any traces of the ם ו on either squeeze, cast, or stone ; and it seems highly probable that a fissure in the rock here existed at the time when the inscription was cut.

The two letters הן at the beginning of the inscription, which Professor Sayce adopted from Mr. Pilter, I have never been able to find on the stone, although the original surface is preserved, nor have I been able to find the letters (ה)ז at the end of the inscription, which are also absent from Dr. Guthe's copy. Possibly these, and the disputed ת in the second line, may have been marks due to the lime incrustation, and not actual letters at all.

I may now proceed to describe the reasons which induce us to suppose that we have been able to fix the exact point of junction of the two working parties, in a position which exactly agrees with the inscription, according to Professor Sayce's latest translation (*Quarterly Statement*, October, 1881, p. 284). For this purpose we have prepared an enlarged plan and section of the central part of the tunnel, where a remarkable S shaped contortion occurs.

At the points *a*, *b*, *c*, *e*, *f*, *g*, *h*, and *i*, certain *set backs* will be observed in the walls of the passage, which indicate a sudden change in direction on the part of the excavator. They are, indeed, false heads, abandoned apparently from the conviction that the passage was not going in the right direction. In the case of *h* and *i*, however, which are out of the general direction, and continued further, these recesses may have served as sidings, allowing two excavators to pass one another, which would be impossible without them.

The important point, however, to observe is that some of these headings point up channel, and some point down, and this not without a system, for while *a*, *b*, *c*, *e*, point down, *g*, *h*, *i* point up. Similar headings occur in other parts of the tunnel, but they always agree with the rule thus observed, those which are between the Virgin's Fountain and the point *a*, pointing down stream, and those between *i* and Siloam pointing up stream.

Each of these headings has a rounded top, such as would result from the excavation of the rock with a pick, by a man working with his face to the front. It shows that on turning aside from the heading he left the roof unfinished, in just the form which would result from the swinging of a pick in a curve, which,—as a moment's reflection will convince the reader,—is the shape natural to an unfinished excavation. Looking at the plan then, we see that an excavator facing *down stream* was working at the headings *a*, *b*, *c*, and was three times induced to work away further to his right. Looking at *f*, we see an excavator working up stream and induced to turn to his right. We see, moreover, that the point *e* might have been the actual point where the channels met, as there is a slight set back down stream within 2 feet of the set back *f*, up-stream.

Now on looking at the section and cross-section, it will be seen that there is a sudden difference of level in the roof of the channel at this point.

Within a distance of 2 feet 6 inches it falls from 4 feet 8 inches to 3 feet 7 inches, and a sort of ruin occurs where the lower channel (up-stream) joins the more lofty down-stream excavation.

In fact, the general appearance of this part of the tunnel, looking up-stream from *f*, is that of a smaller drain opening into a main drain, and would of itself suggest that this is the point of junction, without considering the testimony of the headings. It may, therefore, I think, be considered certain that the place of junction was at the point *e*, or 944 feet from the mouth of the tunnel, and consequently 813·6 feet from the back of the Virgin's Fountain.

This discovery agrees in a remarkable manner with the wording of the

inscription. In the directions which are indicated by the headings at *a* and *f* the two parties were working nearly parallel to one another, and might have passed each other without joining, having a thickness of seven feet of rock between ; those in the up-stream channel being to the right or east of those in the down-stream tunnel. Each, therefore, began to turn to his right ; and those in the up-stream channel did so most rapidly. The shape of the cutting at the point *d* gives evidence of a very complete change of axis. This is not, as might be supposed from the plan, an up-stream heading, conflicting with what has been said before ; for the roof of the tunnel at *d* is curved on the *side* and not at the *end* of this set back, showing that the workman, after leaving the false headings *a*, *b*, *c*, began to widen the channel on his right, facing for a short time to the side instead of to his front. The little buttress thus left was never cleared away, but remains to give its evidence of the method of excavation of the tunnel.

The inscription (line 2) tells us that *three cubits* remained to be broken through, when it was discovered that there was an "excess in the rock to the right." Now if we consider the down-stream party to have worked to *e*, it will be seen that the party at *d* were just three cubits of 16 inches from them, when they discovered their excess, and began to cut away the rock on the right. It was this which was done according to the text (line 3), for they "struck on the west" that is, facing west, just as we have seen the excavator at *d* must have faced. The party at *e*, in the meanwhile, seem to have stopped working, which they would naturally do, to avoid injuring, or being injured by, the others when the pick struck through the last dividing partition of rock. Again, in the last line, we read that "three-fourths [?] of a cubit was the height of the rock over the head of the excavation." If this be the correct reading, it is remarkable that the difference of height of the two channels at the point of junction is just 13 inches or close upon three-fourths of a cubit of 16 inches.

Unfortunately, however, the text is deficient just in the place where the number occurs, and it appears, according to Professor Sayce, that the word אמה is used as a plural : it may, therefore, be found that the measurement recorded in the inscription refers to something else. The words "height of the rock over the head of the excavation," strictly interpreted, would seem to infer that the excavators were aware of the thickness of the rock above them, that is, of the depth of the channel below the surface of the hill. This they could only ascertain either by measurement at the mouths of the channel, or by running contours over the hill,—just as the accompanying section is constructed from the contours—unless they made a shaft to the surface. This is just what they did, for at a distance of 470 feet from the south end a shaft still exists reaching up to the rock surface. It is covered in above with large fallen blocks, but was no doubt once open and served as a well mouth. The rock surface is 14 feet above the floor of the tunnel, the height of which is 3 feet 8 inches at this point. The thickness of rock is, therefore, about 10 feet "above the head of the excavation" at the shaft. This is

the minimum thickness, as is shown by the section, for towards the north the rock surface is 170 feet above the roof of the tunnel. Perhaps in the end the doubtful word may prove to be מאת "an hundred," of which the first and last letters certainly occur, though the א has not been discerned; and the inscription in such a case would refer, in general terms, to the average thickness of the rock above the aqueduct.

Still more interesting is the question whether the length of "a thousand cubits" can have any connection with the measured length of the canal. It is remarkable that 1,700 feet is very close upon 1,000 cubits of 21 inches, and is also very nearly 1,200 cubits of 17 inches, so that the two readings adopted by Professor Sayce and Mr. Shapira respectively might both be supported on the assumption of a different length for the cubit. It would, however, be a very astonishing coincidence if a tunnel so irregularly excavated should in the end have proved to be exactly a thousand cubits long, and it seems far more probable that the writer of the inscription gives an estimated or approximate length, in round numbers, in which case the inscription has no value as fixing the length of the cubit. I have given, in the *Quarterly Statement* of 1880, a *résumé* of the measurements of the Jerusalem Haram and the Galilean Synagogues, which appear to indicate a length of about 16 inches as that of the Jewish cubit, which was not of necessity the same as the Egyptian cubit.

The average measurement of the human hand, as compared with the length of the Zereth or breadth of four fingers, and of the *sit* or span; and the digit of Maimonides as compared with the contents of an average egg, all agree with this shorter measurement. The "cubit" (or fore-arm) "of a man" cannot be measured so as to give 21 inches, nor could 48 barleycorns be made to measure more than about 16 inches (cf. "Handbook to Bible," pp. 57, 79).

Unfortunately, Mr. Beswick's calculations, which reduces the length of the tunnel to 1,478 feet, is founded on a misconception (*Quarterly Statement*, 1881, p. 295), as the length of the branch from the Virgin's Fountain is not included in the total of 1,708 feet.

We have, however, paid special attention to the question whether any marks of measurement could be found on the walls or roof of the channel, and we obtained measurements of certain distances between marks on the wall, of which a digest is given below. The marks in question are evidently artificial, being square or triangular notches measuring about 1½ inches wide. In one place two of them occur 8 inches apart (half a cubit of 16 inches), which, if it had any weight, would seem to indicate that the measurements were not very carefully taken. It seems impossible, however, to deduce any result of value from the measurements tabulated.

There are marks in other places where iron cramps seem to have been driven some 3 inches into the rock, but these also have no regular interval of occurrence, and a very careful examination of both walls, four times repeated, has failed to show us any other marks or signs than those above-mentioned.

The general impression resulting from an examination of the conduit is that it was the work of a people whose knowledge of engineering was rudimentary. It is well known that in mining it is very difficult to induce the excavator to keep in a truly straight line, the tendency being to diverge very rapidly to one side. It is possible that this is the real reason of the crooked run of the canal; but another reason may have been the comparative hardness of the strata met in mining at an uniform level through a hill, with beds having a considerable dip. It will, however, be observed that, after passing the shaft, the direction of the tunnel changes to a line more truly directed on the Virgin's Fountain. The excavators from the Siloam end became aware, probably, by the impossibility of seeing a light at the head of the mine, when standing at the mouth of the channel, that they were not going straight, and the only means they had of correcting the error, consisted in making a shaft up to the surface to see where they had got to. After ascertaining this, they went straight for about 140 feet, and then diverged gradually to the left; but their general direction, nevertheless, agrees roughly with that of the rock contour, which may be due to following a particular seam of rock.

The northern party were yet more hopelessly in the dark, and the great divergence to the west can only be explained by supposing that they did not know where they were going. They seem to have been guided, at length, by the sound of the picks in the other tunnel, which would be heard at a considerable distance through the soft rock, but even then their course indicates great uncertainty.

It is also apparent that a rivalry must have existed between the two parties, working as the inscription tells us "eagerly;" for the two narrowest parts of the tunnel occur, one on either side of the point of junction. In fact, the excavators must be accused of scamping their work, with the object of showing a greater total length than their rivals, and for this purpose they reduced the size of the excavation to a minimum in which it seems almost impossible that a man could have worked. It is clear, anyhow, that the excavators were not giants, and probable that they were under the average size of the modern peasantry in Palestine.

Another interesting question is the increase of height in the tunnel near the point of junction. This may have been due to the intention of concealing their previous proceedings, but it seems more probable that the reason is to be found in the difference of level between the two channels where they meet. The height of the channel does not appear—according to the section—to bear any relation to the thickness of the rock above, but there must evidently have been some cause for the difference of height in various parts of the aqueduct. There is a fall of a foot in the whole length of the tunnel, but the bottom is coated with very hard mud, so that it is quite impossible to ascertain whether the floor is properly levelled or no. At one point (*h* on enlarged plan) a sudden fall of 4 inches appears to occur in the floor level, and the water becomes deeper within a few steps. From this point, also, the roof begins to rise, and gets gradually higher. In 49 feet from *h* to the point of junction *e*, the tunnel increases from

2 feet 6 inches to 4 feet 8 inches in height. It seems probable, therefore, that the southern, or up-stream tunnel, struck higher by about 2 feet than the floor of the down stream shaft, and that the floor was subsequently lowered as far as *h*, when it was found that the water would flow for the rest of the way to the pool without further alteration. This inference could only be drawn from the fact of the *southern* channel being the highest—which is the case. If the northern channel had been the highest we should probably have found a kind of shoot, instead of a gradual levelling off of the floor. The observation serves, however, to give an independent confirmation of the determination of the point of junction before indicated from consideration of the plan alone.

With all allowances, it is nevertheless remarkable that there should have been so little difference of level between the two tunnels. It would have been easy from the flow of the torrent in the Kedron, to make sure that the Pool of Siloam was lower than the spring; and it would not have been difficult by means of a plummet or of a rude water level of some kind, to preserve the level of the channel floor; but it is extraordinary that the two extreme ends of the channel should differ by only a foot in level, considering that the two ends were started independently.

The two ends of the channel are more lofty than any other part, and near the mouth the tunnel is 12 to 16 feet high. Perhaps this may also be connected with the question of the water level, for the intermittent flow of the Virgin's Pool must have caused considerable difficulties. It is true that at the time of the excavation of the tunnel, the overflow of the spring appears to have been carried off by the "brook that ran through the midst of the land" (2 Chron., xxxii, 4), but some of the water would, nevertheless, run down the channel. If, however, the floor of the tunnel at its upper end had been kept about a foot above the high-water mark until the end of the work, this would have been sufficient to prevent any flow down the tunnel. The height of the aqueduct at the upper end is $2\frac{1}{2}$ feet, and it increases rapidly to 6 feet in 20 feet distance, after which it decreases gradually to about 3 feet. This might be explained by supposing that the tunnel was purposely at first run up-hill for a short distance to prevent the water entering, and was afterwards enlarged by sinking the floor so as to admit the overflow when the natural outflow of the Virgin's Pool down the Kedron valley was stopped.

The enlargement at the southern end may also be due to the sinking of the floor after the junction had been effected. It may have been found that the water stood in the tunnel and could not flow into the pool. The excavators would then cut away the rock floor until the water ran through, and the roof would consequently be higher above the water than near the centre where the water was standing. In this case, it seems to have been merely accidental that the levels of the tunnels near the point of junction were so nearly the same, and the differences of height in various parts are seen to be easily explained, on the theory that the aqueduct required considerable alteration after the junction had been effected, and the water

admitted into the upper part of the channel in order to obtain an outflow at the pool of Siloam.

I have thus enumerated all the points which seem to me of importance, as bearing on the method of construction of the canal, and its relation to the wording of the inscription. The number of small bends and irregularities in the course of the tunnel shows, not less than do the larger irregularities, that it was the work of primitive engineers, unacquainted with any very accurate instruments or methods of measurement. Such rock-cut channels are found in other parts of Palestine (as at 'Askar, near Shechem, Sheet XI; at 'Anîn, Sheet VIII; or at Lejjûn, Sheet VIII), but the Siloam tunnel is the most important work of the kind yet discovered. The sides are covered up to a height of about 3 feet with a thin red cement, very hard, and full of pounded pottery, being exactly similar in constitution to that now used in Palestine for lining cisterns. The cracks in the rock are in many places filled in with similar cement above the 3-feet level. In other places the rock has been cut away so as to form a little drain, by which a small land-spring could be led into the channel.

The lower part of the channel has been widened slightly in the parts where the tunnel is highest, the walls being scooped out some 3 inches on either side to a height of about 2½ feet. There is also a shaft or standing place at 700 feet from the south end. It is 7 feet high from the floor, and the roof is of rock. Possibly it was made by the excavator to rest himself in by standing upright after working for a long time in a recumbent position, for it is near the lowest part of the tunnel. It may also have been constructed for safety when the sudden overflow of the spring filled the tunnel, for his head would be high above the water if he sat or stood under this shaft.

We did not observe any side entrance into the channel at any point, and the walls and roof are of solid rock throughout. The initials J. A. S. H. M., and date 1835, are burnt with the smoke of a candle on the roof of the tunnel at 240 feet from the southern end.

In connection with this tunnel I may add a few words as to the new aqueduct recently discovered by the Fellahin. It was not apparently examined by Dr. Guthe, and only a small part of it is at present visible. The level of the top of the covering stones is about 2,091 feet at the point observed. The stones are 1 foot thick, and the channel beneath is at least 2 feet deep, and probably more, as it is filled up with rubbish. This gives a level 2,088 feet, which is a foot above the level of the bottom of the pool of Siloam, from which this aqueduct appears to have led. The channel is rock-cut, 3½ feet wide, and roofed with slabs of stone. In some of these there are slits about 3 inches wide and 20 inches long, but the object of these openings is not clear, unless they served for air holes to relieve the pressure. The aqueduct appears to follow the contour of the hill, westwards from Siloam, and the Fellahin, who have not discovered the end of it, suggested that it went to the Bîr Eyûb, where it will be remembered Colonel Warren found an unfinished subterranean channel. The difference of level is,

however, too great to allow of the two being probably connected. It would be very interesting to follow up the aqueduct from both ends, especially as it may furnish the real explanation of the expression that Hezekiah "Stopped the watercourse of the upper spring and brought it straight down to the west side of the City of David" (2 Chron. xxxii, 30), thus throwing some light on the vexed question of the position of this part of Jerusalem. It is quite possible that subterranean reservoirs, as yet unknown, may exist in connection with this aqueduct, for the Bîr Eyûb itself was long quite unknown, and was recovered in the middle ages by excavation.

C. R. C.

TABLE OF DISTANCES.

Siloam Tunnel.

The Zero marks the commencement of a series of measurements between two or more notches.

	Feet.	16-inch cubit.	17·72-inch cubit.	18-inch cubit.	21-inch cubit.
Notch A	0	0	0	0	0
,, B	$\frac{6}{12}$	·5	·45	·44	·38
,, C	$57\frac{6}{12}$	43·12	38·43	38·33	32 86
,, D	0	0	0	0	0
,, E	$41\frac{0}{12}$	31·37	28·33	27·87	23·90
,, F	0	0	0	0	0
,, G	$12\frac{8}{12}$	9·5	8·57	8·44	7·24
,, H	0	0	0	0	0
,, I	$15\frac{2}{12}$	11·37	10·27	10·11	8·69
,, J	0	0	0	0	0
,, K	$25\frac{6}{12}$	19·12	17·27	17·	14·57
,, L	$24\frac{6}{12}$	18·37	16·59	15·93	13·52
,, M	$9\frac{6}{12}$	7·12	6·43	6·33	5·43

KADESH ON THE ORONTES.

Arros House, Central Hill, Upper Norwood,
March 20th, 1882.

It was scarcely worth Mr. Tomkins' while to carry our different opinions from the Society of Biblical Archæology, where we had his maps and diagrams, and ample opportunity for discussion, to your "*Quarterly*." As he has done so, however, I beg to re-state my reasons for agreeing with Lieutenant Conder, and disagreeing with him :—

1. Forty years ago the Rev. Dr. Thomson found the name Kadesh clinging to the place. In the "Land and the Book," page 110, he says, "At Kedes, an old city near the head of the Lake of Hums, I found the peasants breaking up beautiful marble columns with sledge-hammers," &c.
2. In 1872 I visited Tell Neby Mendeh, in company with Mr. Kirby Green, H.B. Majesty's Consul. We spent a night and part of two days in the place, and found the name still known to the people.
3. Mr. Tomkins' own maps and plans, showing the combatants in action all round the lake, practically disposed of Mr. Tomkins' theory.
4. The complaint of Rameses II, as he stumbled into the Khita ambuscade, that his army being at the Lake of the Amorites, had left him in the lurch. Had the Egyptian army been at the sheet of water at the city Kadesh, they would have been in the proper place to have supported their king, and they could not have been considered absent.

Regretting my inability to agree with Mr. Tomkins on this point, I gladly acknowledge the good service he has done in drawing attention to the subject.

William Wright.

ASSYRIAN DISCOVERIES NEAR BAGDAD.

During a discussion which recently took place on a paper read at the Victoria Institute by the Rev. H. G. Tomkins, on Biblical Proper Names, Mr. Rassam, the well-known discoverer of Assyrian relics, made the following statement in reference to his recent researches in the neighbourhood of Bagdad. "Mr. Tomkins has alluded to the discoveries I have been enabled to make among the ancient cities of the East. I am sorry I

cannot at present say much about what I have recently been doing, or I should have given the account elsewhere. Indeed, with one exception, I have not very much to tell you since the lecture I delivered here two years ago. I will, however, offer you a brief statement of what I have lately discovered. In March last I went out again to the East, as you know I am always doing, for the purpose of finding out the old cities which lie buried there. As I was journeying on one occasion in pursuit of this object, I met with an Arab who told me that he knew of an old ruined city, the remains of which were to be found within five hours of Bagdad—that is to say, taking the computation at three miles an hour, the place he knew of was fifteen miles from Bagdad. As I am one who never refuses to act on any information likely to lead to some practical result, I said I would go with him to the place indicated. I therefore accompanied him ; and as we were travelling along the route pointed out by the Arab, we came at a distance of four hours' journeying upon an old ruin that I had never seen before—a ruin of great magnitude —so large, indeed, that it must be about three miles in circumference. I at first thought that this was the place of which my guide had spoken, and I said to him, "Oh ! this is the place ?" He replied, "No ; that is not the place I told you of, it is further on." Then I said, "What is this place ?" He answered, "I do not know." However, I made up my mind that I would certainly explore it when I came back. We consequently went onwards, and at last the Arab showed me a most wonderful ruin. I set to work and excavated there, but I found nothing of any antiquarian value. I afterwards went back to the place I had first seen, and commenced a thorough search there. The result was, that after digging for four days we came upon the top of some walls. This induced us to persevere with increased ardour, and we soon found that we had come upon an enormous building, in which we began to find inscriptions. I may here say that I am not an Assyrian reader. I am only a discoverer of Assyrian relics, which I send to the British Museum, where those who have made Assyriology a study interpret the inscriptions I find. We first of all discovered four rooms, and then came upon a fifth. They were what I should call generally of the Assyrian or Babylonian order, and paved with bricks or stones ; but the fifth room was paved with asphalte, the discovery of which brought to my mind Solomon's saying—"There is nothing new under the sun." Previous to this I had always thought that asphalte was a modern invention. Singular as this discovery was, we dug through the asphalte, and in a short time we were rewarded by coming upon a coffer on which we found inscriptions. From this coffer we took two cylinders. These were covered with inscriptions, which are supposed to be the most important records of the oldest city in the world, founded, as historians tell us, by Noah after the Deluge, and where, according to tradition, Noah buried the antediluvian records. Well, I had to come home ; but I left some workmen continuing the operations at the spot, and I have ascertained that they have found, after a few days' more digging, that in one of the rooms there was a channel, and

inside that channel there were records inscribed on nearly ten thousand tablets. These tablets are all coming to England, but we cannot of course as yet say what they contain. They may contain something of even greater value than anything that has hitherto been discovered in the course of our Eastern researches. It may be, indeed, that we shall really find on them the antediluvian records of which I have spoken. After I have been out there again I shall be happy to give you further information as to this interesting discovery on my return. I hope to be going out in another month, and then I trust I shall be able to make still further advances on what we have already discovered."

CROMLECHS ON THE EAST OF JORDAN.

Captain Conder, in his interesting account of survey work done by him and his companions East of Jordan, speaks of having found some 400 cromlechs. This agrees with the statements made to my husband by his Arab escort when he visited that country in 1855, "our guides told us that they abound all over the hills." In his "Byways in Palestine," 1st Edition, p. 64, he gives a drawing of one of several which he saw after leaving Sûf, going northwards through Bashan. They were constructed of four huge slabs of brown flinty looking stone forming a chamber ; two for sides, one for back, and a cover over all which measured eleven feet by six and about four feet high. Mr. Finn considered them to be of Pagan origin, and that they were altars.* This view has been adopted by Captain Conder, who finds that they are connected with sacred centres and with stone circles, and he shows how, in placing an offering on the top slab or lintel, the offerer must face east, as most of the cromlechs occur on the west of the circle. Some have supposed the last half of the word cromlech to be identical with the Hebrew לוּחַ *l'wach*, "tablet" or "slab." It is interesting to observe that the cromlechs found by Captain Conder are mostly placed on the live rock. He also finds holes often excavated in the live rock close to the cromlechs, as also a similar hole in the top slab, probably to receive the live embers (charcoal) for kindling the sacrifice. Various passages of Holy Scripture come to mind in reading these things, and first in importance are the numerous references to the rock צוּר as an emblem of God (see Deut. xxxii, 4; and xxx, xxxi ; and 1 Cor. x, 1 and many other passages).

Moses speaks of the heathen gods : "Their rock is not as our rock." Deut. xxxii, 31. Again, God forbade hewn blocks or slabs to be used in building His altar, Ex. xx, 25. The very altars were to be different. It is interesting to notice that Manoah placed his altar upon a rock, Judges, xiii, 19. And the connection of the great rock on Moriah with the temple and the altar is very interesting. The rugged simplicity

* *See* also "Byways," p. 283, for the account of a remarkable rude stone monument between Tyre and Sidon.

that venerable rock still bears testimony to the obedience of the Hebrew people to the law of Moses. It was left unhewn, though, but the base foundation of the temple and altar. The Bedaween told Captain Conder that the cromlechs are called "Beit el Ghul," "ghouls' house," *i.e.*, demons. Compare this with the statement of Moses in the chapter above quoted, Deut. xxxii, where the rock of Israel is contrasted with the heathen "no—gods" in verse 17. They sacrificed unto devils, that is, demons. St. Paul, in 1 Cor. x, evidently has these passages in his mind, when he speaks of the rock, v. 1, and in v. 20, "the Gentiles sacrifice to devils (δαιμόνια), not to God." The word used here is the same as used in the Septuagint, Deut. xxx, 11–17, and signifies, like the Arabic "ghoul," a malignant demon. The Arab tradition has preserved for us the allusion to ancient customs older than the days when Deuteronomy was written by Moses on the eastern side of Jordan, where these altars not "*overthrown*" by Israel still exist.

E. A. Finn.

THE MOUNTAIN OF THE SCAPE GOAT.

Jerusalem, *January*, 18, 1882.

Having visited to-day, under the guidance of Sheikh Rashid, El Muntâr, I am able to confirm what is said by Captain Conder in the *Quarterly Statement*, p. 206.

The distance from Jerusalem, the grand view of Jerusalem, the expanse of country spread out before one, the strange character of the mountain (on the one side rolling in rich folds of pasture grounds tenanted by numberless flocks, on the other, bleak, bare, chill, and precipitous), the accordance of the nomenclature, all these things make one believe that this *must* be the "mountain of the scape goat."

I do not know whether Captain Conder has called attention to the large cistern on the top of the mountain, to the fragmentary pieces of mosaic pavement, or to the traces of walls and other buildings.

One thinks generally that not much may be done on a winter day. But this morning—with its heavy clouds massing over and then drifting away from Jerusalem, and the many bursts of sunshine bringing out every detail,—Bethlehem, Beit Jâla, the Hill of Evil Counsel, Zion, Moriah, the Mount of Olives, &c., were lighted up in a marvellous manner.

The view to the north-east was very cloudy, but the view of the Dead Sea and the desert country of Judah was magnificent!

C. Pickering Clarke.